TAW10 - Week 2

Total Score: 0 %

1 - A program needs to gain access to the public attri ...

2 - The concept of restricting direct access to data v ...

3 - Identify the characteristics of the self reference ...

4 - The syntax for instance method specification is ...

5 - What syntax provides access to individual componen ...

6 - Identify the ABAP OO Event signature protocols ...

7 - Mark the item that is NOT true about the handler t ...

8 - In the following method, what other parameters are ...

9 - What implications exist when private components of ...

10 - Finish the following sentence so that it is TRUE. ...

11 - Choose the correct redefinition of the superclass ...

12 - In the context of Triggering and Handling of Event ...

13 - An inherited class : ...

14 - What is contained in a class that does not exist i ...

15 - How can a program access private attributes of an ...

16 - Which of the following answers characterize ABAP O ...

17 - Mark the items that characterize some primary diff ...

18 - A public attribute 'color' is added to a superclass ...

19 - Where would the components of a class be defined ...

20 - Select the term used for Classes that can implemen ...
21 - What are the rules for Event parameters ...

22 - When redefining methods in a subclass, what is all ...

23 - Define Polymorphism ...

24 - Where are the methods of a class implemented ...

25 - Your program has registered several handler method ...

26 - A program needs to gain access to the public attri ...

27 - Class A provides friendship to Class B. Class B pr ...

28 - Pick the syntax for a functional method with only ...

29 - In object orientation, the term “USER” includes ...

30 - Initializing an object in a subclass requires that ...

31 - Identify the valid statements that will write out ...

32 - The syntax for static method specification ...

33 - What triggers an event ...

34 - What can be said about the visibility of attribute ...

35 - Mark the operator used to widen cast of a class ...

36 - Identify the statements that best describe the vis ...

37 - Changing the view of an instance of a class with m ...

38 - What happens when the Set Handler command is execu ...

39 - Mark the items that characterize the Methods of a ...

40 - Refer to the following code and indicate which sta ...

41 - Local Class lcl_course has been defined in a progr ...

42 - A MOVE_CAST_ERROR runtime error just occurred. Ide ...
43 - Refer to the following code and Select the VALID m ...
44 - Using example code below, choose the correct synta ...
45 - What can be said about the lifetime of an object ... 
46 - Global Class cl_course has been defined using the ...
47 - What statement will request memory to be allocated ...
48 - Refer to the following code and identify the state ...
49 - Identify the Characteristics of a Final Class ...
50 - Using the UML modeling language for ABAP OO design ...
51 - Identify the behaviors of Abstract Classes. ...
52 - What is possible with a subclass in an inheritance ...
53 - In the context of polymorphism and interfaces, m ...
54 - Select the answers that apply to static methods an ...
55 - Identify the valid rule when calling public method ...
56 - Where is the visibility of class components define ...
57 - Identify the one addition that is not part of the ...
58 - Which statement will create an instance of a class ...
59 - Identify the line that contains the valid use of t ...
60 - What mechanism is used to define common components ...
61 - What is the only component that is implemented in ...
62 - In the context of relationship between Super and S ...
63 - Identify the requirements that determine when an o ...
64 - How do you call the method in a superclass that ha ...
65 - Mark the invalid attribute definitions ...
66 - What is true about classes and objects in Object O ...

67 - Identify the statement about Global Classes that i ...
A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

class lcl_course definition.
  public section.
    data: name(15) type c value 'ABAPObjects101'.
    class-data price type p value 100.
  private section.
    data: category(10) type C value 'Objects'.
  endclass.

data: course1 type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.

**INSTANTIATION OMITTED **

(More than one answer is correct)

- course_name = name
- name can not be accessed unless course1 is instantiated
- course_name = course1=>name.
- course_name = course1->name.
- course_price = lcl_course=>price.

The concept of restricting direct access to data via hidden internal processes is best represented by which term

- Instantiation
- Encapsulation
- Inheritance
- Polymorphism

Identify the characteristics of the self reference ME
Self references allow an object to give other objects a reference to it.

The self-reference ME can be used to access individual components

All answers are correct

None of the answers are correct

The reference ME can be used to determine the dynamic type of the reference variable in the debugger

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The syntax for instance method specification is

(More than one answer is correct)

- Call method Objref=>method
- Call Method->Objref
- Call method (from within another instance method)
- Call method Objref->method

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What syntax provides access to individual components of a class within the class

(More than one answer is correct)

- CALL METHOD object instance->ME->
- ME->
- CALL METHOD ME->
- object instance->ME->

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Identify the ABAP OO Event signature protocols

(More than one answer is correct)

- Events can only have exporting Parameters
- Exporting parameters can only be passed by reference
- Exporting parameters can only be passed by value
Events can only have importing Parameters

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Mark the item that is NOT true about the handler table

- Event handler methods are called in the sequence that they were registered in the handler table
- There is a separate handler table for every object that has defined events
- **Registered Methods in the handler table can only be triggered by RAISE EVENT i.e. not by CALL METHOD**
- A single SET Handler command can be used to register multiple handler methods in the handler table

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In the following method, what other parameters are allowed

CLASS lcl_course DEFINITION.
PUBLIC SECTION.
METHODS: get_course_name
   IMPORTING im_name type string
   Returning value(student_count) type I
.
ENDCLASS.

- Exceptions
- Exporting
- Changing
- Receiving

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What implications exist when private components of a class are changed

- Users of the private components must change their interface
- Any programs accessing the class must also change
- Programs are insulated from change
- **None of the answers are correct**
Finish the following sentence so that it is TRUE.
Static Components in an inheritance relationship........

(More than one answer is correct)

☑️ does not allow for methods to be redefined in subclasses
☐ cannot be shared
☐ exist once per roll area
☑️ receive their own copy of the static attribute for each subclass

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Choose the correct redefinition of the superclass method in class lcl_super_course

*Super Class Definition
CLASS lcl_super_course DEFINITION.
   PUBLIC SECTION.
      METHODS: get_course_name IMPORTING im_name type string.
   ENDCLASS.

*Sub Class Method ReDefinition
A
CLASS lcl_sub_course DEFINITION INHERITING FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name IMPORTING im_name type string.
   ENDCLASS.

B
CLASS lcl_sub_course DEFINITION INHERITING FROM lcl_super_course.
   PUBLIC SECTION.
      METHODS: get_course_name IMPORTING im_name type string.
   ENDCLASS.

C
CLASS lcl_sub_course DEFINITION INHERITING FROM lcl_super_course.
   PRIVATE SECTION.
      METHODS: get_course_name REDEFINITION.
   ENDCLASS.
CLASS lcl_sub_course DEFINITION INHERITING FROM lcl_super_course.

PUBLIC SECTION.
METHODS: get_course_name REDEFINITION.
ENDCLASS.

- SubClass Definition B
- SubClass Definition A
- SubClass Definition C
- SubClass Definition D

In the context of Triggering and Handling of Events, mark those which apply

(More than one answer is correct)
- Events can be triggered with the “Trigger Event” command
- Methods must be registered to an event in order to be called when the event is triggered
- An event is defined in the Implementation of a Class
- Event Triggering using “Raise Event” can be issued in a method

An inherited class:

(More than one answer is correct)
- can remove superclass components
- can add components over and above the superclass
- can access the inherited private components
- can redefine the public methods of the superclass
- cannot access the protected components

What is contained in a class that does not exist in an interface
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How can a program access private attributes of an object

☐ By methods of a different object within the same Program
☒ Only by methods of the specific object itself
☐ By methods of a different instance of the same object
☐ From outside the class

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Which of the following answers characterize ABAP OO events

(More than one answer is correct)

☒ Classes subscribe to events
☐ Events subscribe to classes
☐ Methods subscribe to classes
☒ Classes trigger events
☐ Start-of-selection is an OO event

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Mark the items that characterize some primary differences between objects and functions

(More than one answer is correct)

☐ Functions allow multiple instances of the same data objects. Objects only allow single instances of data
☒ Calling a function loads the entire function group implicitly into memory whereas instances of an object are generated explicitly when an object is created
A program can only work with a single instance of the same function group versus a program can access several instances of the same object.

A program can directly access data in the function group while access to data in an object is not possible.

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A public attribute 'color' is added to a superclass. A subclass already has the same attribute 'color'. What is the outcome?

(More than one answer is correct)

- The subclass is invalidated
- A syntax message will occur
- The superclass is invalidated
- A runtime error will occur

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Where would the components of a class be defined?

- Logic component of a program
- Implementation part of a class
- Data Component of a program
- Definition part of Class

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Select the term used for Classes that can implement the same method differently.

- polymorphism
- inheritance
- encapsulation
- casting
- instantiation

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What are the rules for Event parameters

(More than one answer is correct)

- EXPORTING Parameters for events can only be passed by value
- EXPORTING Parameters for events can only be passed by reference
- Events can only have EXPORTING parameters
- Events also allow RETURNING parameters

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When redefining methods in a subclass, what is allowed?

(More than one answer is correct)

- Code can be changed
- Only Instance methods
- Signature can be changed
- Private Static methods

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Define Polymorphism

(More than one answer is correct)

- it’s a characteristic when methods of the same class react differently to the same method call
- it’s one of the main strengths of inheritance
- it’s a characteristic when methods from different classes react differently to the same interface
- the same method is implemented in different ways by redefining the method in subclasses
- it’s a characteristic when objects from different classes react differently to the same method call
Where are the methods of a class implemented

- Object instantiation part of a program
- Implementation part of a class
- Definition part of Class
- Call method of the class

Your program has registered several handler methods. How does the program know what methods are available for execution when an event is triggered

- The system looks for registered handler methods in the registry table and processes those that are registered for the event
- The system looks for registered handler methods in the event handler internal table and processes those that are registered for the event
- The methods defined in the Class Definition listen for raised events and respond when an event is triggered
- It is determined by the RAISE Event command

A program needs to gain access to the public attributes of class lcl_course. Identify the statements that are valid.

class lcl_course definition.

    public section.
        data:   name(15) type c value 'ABAPObjects101',
                price   type p value 100.

    private section.
        data: category(10) type C value 'Objects'.

endclass.

data: course1 type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.
Create Object course1.

(More than one answer is correct)

- course_price = lcl_course=>price.
- course_name = course1->name.
- course_name = course1=>name.
- course_name = name
- course_price = lcl_course->price.

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Class A provides friendship to Class B. Class B provides friendship to Class C. Identify the valid friend relationship.

(More than one answer is correct)

- C is friend of A
- C is friend of B
- A is friend of B and C
- B and C are friends of A
- B is friend of A

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Pick the syntax for a functional method with only 1 parameter

(More than one answer is correct)

- refvar->method returning()
- refvar->method(p1)
- refvar->method(im = p1)
- refvar->method receiving()

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In object orientation, the term USER includes

- Events
Methods

Attributes

All of the answers are correct

None of the answers are correct

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Initializing an object in a subclass requires that the constructor of the superclass is first called. Identify the correct syntax.

- Call Method Super Constructor
- Call Method Super-> Constructor
- Call Method Constructor
- Call Method Constructor-> Super

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Identify the valid statements that will write out the static attributes in the following code:

class lcl_course definition.

    public section.
        data: name(15) type c value 'ABAPObjects101'.
        class-data price type p value 100.

    private section.
        data: category(10) type C value 'Objects'.

endclass.

data: course1 type ref to lcl_course,
    course_name type string,
    course_price type p,
    course_category type string.

(More than one answer is correct)

- course_price = lcl_course=>price. Write course_price.
- write: price.
- write lcl_course=>price.
- write lcl_course->price.
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**The syntax for static method specification**

- Call method class name->method
- Call method class name =>method
- Call class-method
- Call Method-> class name

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**What triggers an event**

- Raise Event Inside the Method
- Call Method
- None of the answers are correct
- Raise Event
- All answers are correct

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**What can be said about the visibility of attributes in the following code**

CLASS lcl_course DEFINITION.
PUBLIC SECTION.
  Data: name type string.
PRIVATE SECTION.
  Data: price type course-price.
ENDCLASS.

(More than one answer is correct)

- price is protected from outside access
- price is available to methods inside the class
- name is available to methods only inside the class
- name is protected from outside access

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Mark the operator used to widen cast of a class
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Identify the statements that best describe the visibility of classes

(More than one answer is correct)

☑️ Local Classes are available only to the program where the class is defined
☑️ Global classes are centrally available to all ABAP programs
☑️ Local Classes are available only to programs in the same development class
☐ Global Classes are available only from programs belonging to the same development class

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Changing the view of an instance of a class with more details is referred to as

☑️ narrowing cast
☐ up cast
☑️ widening cast
☐ dynamic referencing

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What happens when the Set Handler command is executed

☐ An instance of the event is created
☑️ The Event Handler Method is registered
☐ The Event is triggered
☐ The Event is handled
Mark the items that characterize the Methods of a Class

(More than one answer is correct)

☑ Can change the state of an object
☐ Can access only public attributes in their class
☑ Can access all attributes in their class
☑ Can be defined with a parameter interface
☐ Only pass return codes to the calling program

Refer to the following code and indicate which statements are true

Data: cl_container type ref to cl_gui_custom_container,
      cl_grid type ref to cl_gui_alv_grid.

(More than one answer is correct)

☑ cl_grid points to the object that communicates with the ALV grid control
☐ cl_grid points to the object that communicates with the container control
☐ cl_container points to the object that communicates with the ALV grid control
☑ cl_container points to the object that communicates with the container control

Local Class lcl_course has been defined in a program belonging to development class ZCL. What is the key entry in the repository table TABIR

☐ R3TR CLASS
☐ R3TR LOCAL CLASS
☑ None of the answers are correct
☐ R3TR ZCL CLASS
☐ R3TR lcl_class
Super class and subclass both point to an instance of the same class type

Casting a super class to a subclass when superclass does not point to an instance of the subclass type

Subclass reference variable corresponds to the superclass reference variable

Super class method is called from the subclass

Class lcl_course definition.

Public section.

  data:   course_name(12)  type c.
  methods: display_price
           importing im_course_name type string.

Private section.

  Data:   price            type P value 100.
          constants: c_objects101(10) type c value 'OBJECTS 101'.

endclass.

class lcl_course implementation.

  method display_price.
    course_name = im_course_name.
    If course_name = c_objects101.
      Write: price.
    Endif.
  endmethod.
endclass.

Data obj_course type ref to lcl_course.
create object obj_course.

☑ Call method obj_course->display_price exporting
   im_course_name = 'OBJECTS101'.
☑ Call method obj_course->display_price importing
   im_course_name = 'OBJECTS101'.
☑ Call method obj_course->display_price exporting
   course_name = 'OBJECTS101'.
☑ Call method obj_course->display_price exporting
   im_course_name = c_objects101.

Using example code below, choose the correct syntax for
the redefined method

Class lcl_car definition.
Public Section.
   method calc_speed importing im_distance type ty_dist.
End Class.

☑ Method calc_speed importing im_distance.
☑ Method calc_speed Redefinition.
☑ Method calc_speed importing im_distance Redefinition
☑ Method calc_speed Redefinition importing im_distance type
   ty_dist.

What can be said about the lifetime of an object

☑ All answers are correct
☑ An object exists for as long as it is being used in the
   program
☑ An object exists as long as at least one reference
   points to it
☐ An object exists as long as at least one method of
   the object is registered as an event handler.

Global Class cl_course has been defined using the class
builder. The development class is ZCL. What is the key
entry in the repository table TADIR
R3TR ZCL CLASS

None of the answers are correct

R3TR CLAS cl_course

R3TR cl_course

R3TR GLOB CLASS

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What statement will request memory to be allocated to an object

- Call Constructor
- Create Object
- Call Method
- Create Constructor

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Refer to the following code and identify the statements that are TRUE

CLASS lcl_course DEFINITION.
  PUBLIC SECTION.
    METHODS: get_course_name IMPORTING im_name type string.
    CLASS-METHODS: list_prices_and_discounts.
ENDCLASS.

CLASS lcl_course IMPLEMENTATION.
  METHOD get_course_name.
  ENDMETHOD.

  METHOD list_prices_and_discounts.
  ENDMETHOD.
ENDCLASS.

Data: course1 type ref to lcl_course,
      course2 type ref to lcl_course.

Start-of-selection.

Create object course1.
Course2 = course1.
(More than one answer is correct)

- method list_prices_and_discounts is a static method
- Method list_prices_and_discounts can only be called once
- list_prices_and_discounts is a instance method
- Memory is reserved for 2 instances of lcl_course
- Only one instance of method get_course_name exists
- Only one instance of method list_prices_and_discounts exists

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**Identify the Characteristics of a Final Class**

- No answers are correct
- all answers are correct
- methods cannot be explicitly designated as FINAL
- contains final methods implicitly
- cannot have subclasses

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*Using the UML modeling language for ABAP OO design, refer to the following and indicate the visibility of the components*

```
<table>
<thead>
<tr>
<th>cl_myclass</th>
</tr>
</thead>
<tbody>
<tr>
<td>+city</td>
</tr>
<tr>
<td>#address</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>+ get_city()</td>
</tr>
<tr>
<td>- display_addr()</td>
</tr>
</tbody>
</table>
```

(More than one answer is correct)

- get_city is a public attribute
- address is protected attribute
- display_address is a public method
display_address is a static public method
display_address is a private method
city is a public attribute

Identify the behaviors of Abstract Classes.

(More than one answer is correct)

- Methods can only be implemented in the subclass
- Can only be implemented through an Interface
- Cannot be instantiated
- Methods can not be implemented in the subclass

What is possible with a subclass in an inheritance relationship to the superclass

(More than one answer is correct)

- The subclass can remove components of the superclass
- can add new components to the subclass
- can provide inherited methods with new implementations (redefinition)
- inherits all the characteristics of the superclass
- Components defined in the superclass are not present in the subclass unless they are explicitly defined in the definition of the subclass

In the context of polymorphism and interfaces, mark the item that is NOT true

- the user is protected from the actual implementations
- interfaces describe the point of contact of a class
- interfaces contain their own implementation part
a class can implement any number of interfaces

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Select the answers that apply to static methods and instance methods

(More than one answer is correct)

- Instance methods MUST be addressed by object ref after instantiation
- Static methods MUST be addressed by object reference after instantiation
- Instance methods MUST be addressed by class name
- Static methods MUST be addressed by class_name even when object is instantiated

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Identify the valid rule when calling public methods from within the class

- When calling a static method, the class name is required
- When calling an instance method, the => operator is still required
- When calling a static method, the class name can be omitted
- Private methods can not call public methods

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Where is the visibility of class components defined

- Object Instance
- Class Methods
- Class Implementation
- Class Definition

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Identify the one addition that is not part of the interface of a method

- Result
Class my_class Definition.
Data: my_object TYPE REF TO my_class
Create Object my_object
Class my_class Implementation

class lcl_course definition.
10 public section.
20  Data: Price(3) type p decimals 2
    value 100 READ-ONLY.
30  Types: type_category(15) type C READ-ONLY.
40  Constants: write_position type I value 10 READ-ONLY.
50  private section.
60  data: category(15) type C READ-ONLY,
70  class-data: course_count type I READ-ONLY.
endclass.

What mechanism is used to define common components of different classes in one place
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What is the only component that is implemented in the implementation part of a class?

- ☑️ Method
- ☐ Attribute
- ☐ Object
- ☐ Interface
- ☐ Event

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In the context of relationship between Super and Subclasses, identify the statements which apply

(More than one answer is correct)

- ☐ Subclass does not know it’s superclass
- ☑️ A subclass is a specialization of a superclass
- ☐ A change in a superclass does not automatically get realized in the subclass
- ☑️ Superclass does not know its subclasses
- ☐ A superclass is a specialization of a subclass

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Identify the requirements that determine when an object gets deleted by garbage collection

(More than one answer is correct)

- ☐ When all active objects are marked
- ☑️ When none of its methods are registered as event handlers
- ☑️ When objects can no longer be addressed from main memory
When there are no more references pointing to an object

How do you call the method in a superclass that has the same name as a redefined method in the subclass?

- Call Method Superclass-> mymethod.
- Call Method Super-> mymethod.
- Call Method mymethod.
- You can't. Only the redefined method can be called.

Mark the invalid attribute definitions

class lcl_course definition.

  10 public section.
  20   Data: school(20) type c,
  30       Supervisor type string value 'ADAMS',
  40       Price(3) type p decimals 2 value 100 REA
  50   types: type_category(15) type c,
  60       type_name(10) type c.
  70   constants: write_position type i value 10.
  80   class-data: course_count type i.
  90 private section.
 100   data: category(15) type c,
 110       name(10) type c.
 120   courseid like mara-matnr.

endclass.

30,120
30,80
40,70
70,80
40,120
What is true about classes and objects in Object Oriented ABAP?

(More than one answer is correct)

- [ ] Classes are an instance of an object
- [ ] Objects can change their class
- [x] Class is a template for an object
- [x] Objects are an instance of a class

Identify the statement about Global Classes that is NOT true

- [ ] Class Builder can be used to test global classes
- [ ] A method to be transported is identified in transport organizer as LIMU METH
- [x] Programs that are available to Global Classes must be associated in Class Builder
- [ ] Global classes are stored in TADIR with key R3TR CLAS
- [ ] Access to a global class is done as a reference variable using TYPE REF TO