

 Sri Lanka Institute of Information Technology

Dashboard Examinations Lockdown Browser It19971254 Chamodya E.M.S It19971254 15:45

Question 1
Not yet answered
Marked out of 25.00
Flag question

Read the scenario and draw a **sequence diagram**. (25 Marks)

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save them in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

For a valid login, the user has to select the movie theater that he/she prefers. Then the system will list down all the available movies with the details. The system allows people to book tickets for more than one movie show. For each movie show, he/she is directed to the bookingUI. Then he/she submits movie name with the number of tickets to the system. Then the system checks for vacant seats. If there are vacant seats, system issues the e-ticket to the customer and increases the seat count. For invalid logging, system asks to re-enter details.

Hint: You may use suitable boundary, control, and entity classes in your answer.

Maximum size for new files: 30MB | maximum attachments: 3

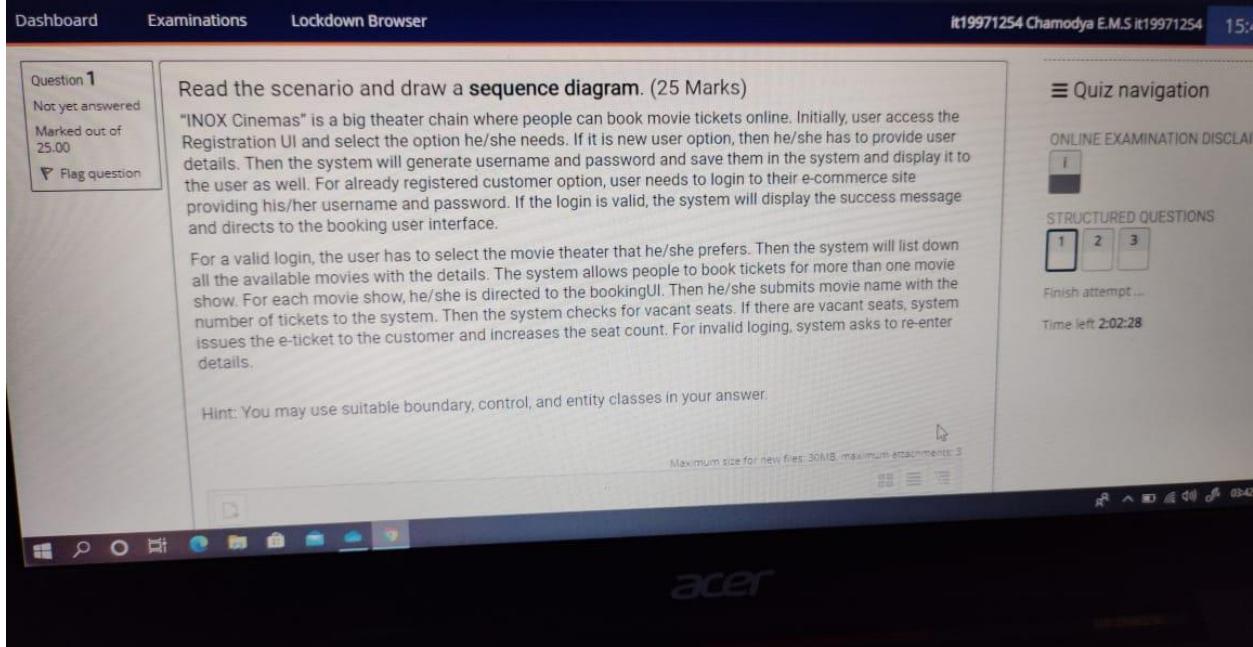
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STRUCTURED QUESTIONS
1 **2** **3**

Quiz navigation

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https://netexam.sliit.lk/mod/quiz/attempt.php?attempt=51820&cmid=1903&page=2

NetExam

Sri Lanka Institute of Information Technology

Examinations Lockdown Browser

It1918712

Given below is a detailed description of a web-based application developed for an online University Management system "E-Uni". Model a physical diagram for the following description. (25 Marks)

Note: You **MUST** use appropriate operating systems in required places.

To handle university operations much easier, "E-Uni" system can be accessed by both Mobile and Desktop users. The desktop user can access the "E-Uni" web application through a browser while a mobile user needs to setup the "E-UniMob" mobile app from the App-Store.

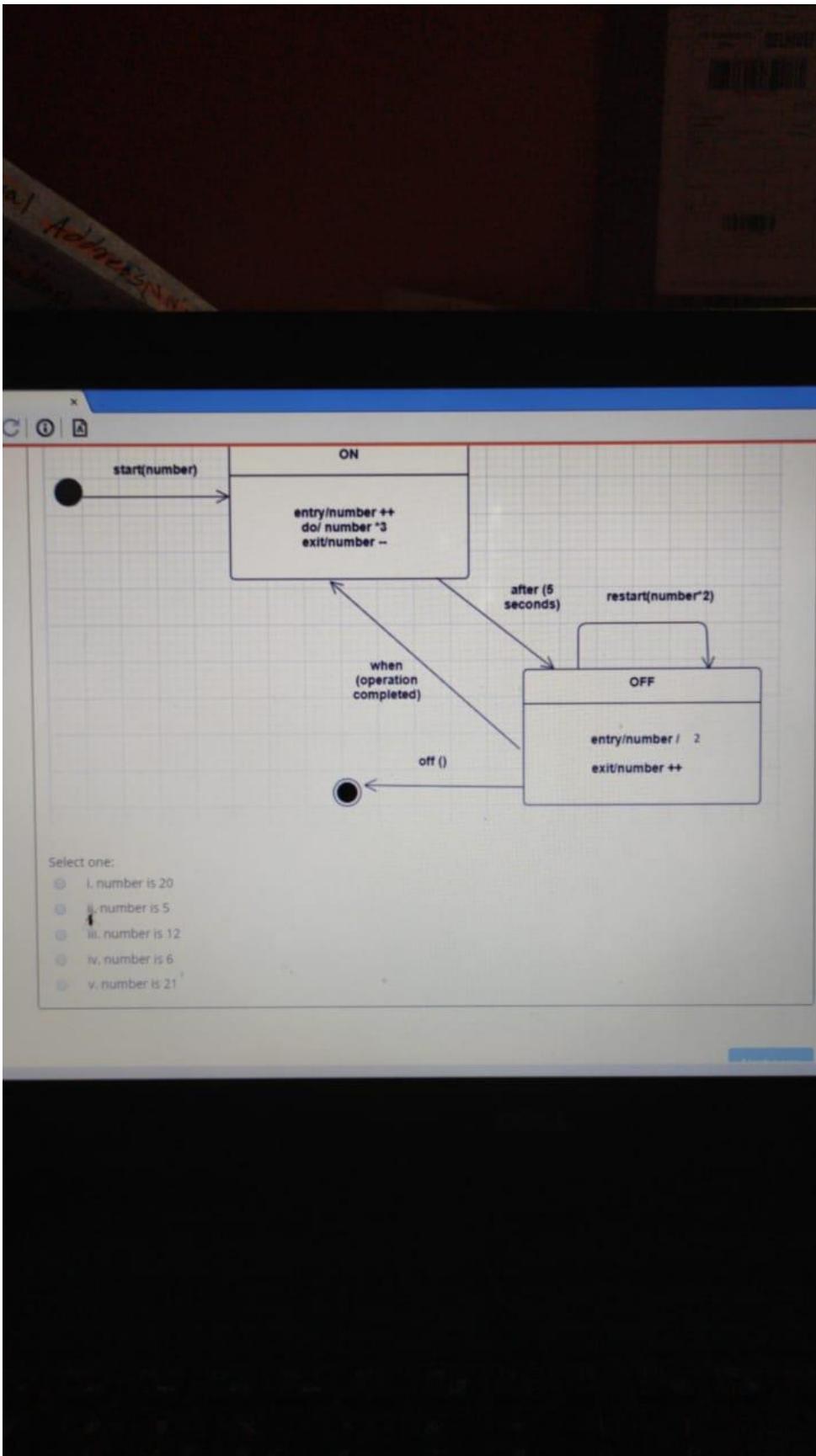
The main application of E-Uni runs in a web server, which deployed in Lenovo ThinkSystemSR590 Server. The E-Uni application contains three subcomponents: Student, Lecturer and Module. The Student component implements iStudent interface used by both Lecturer and Module components. The Student component facilitates to handle all the information and activities relates to students while Lecturer and Module components handle all the activities and information related to lectures and modules.

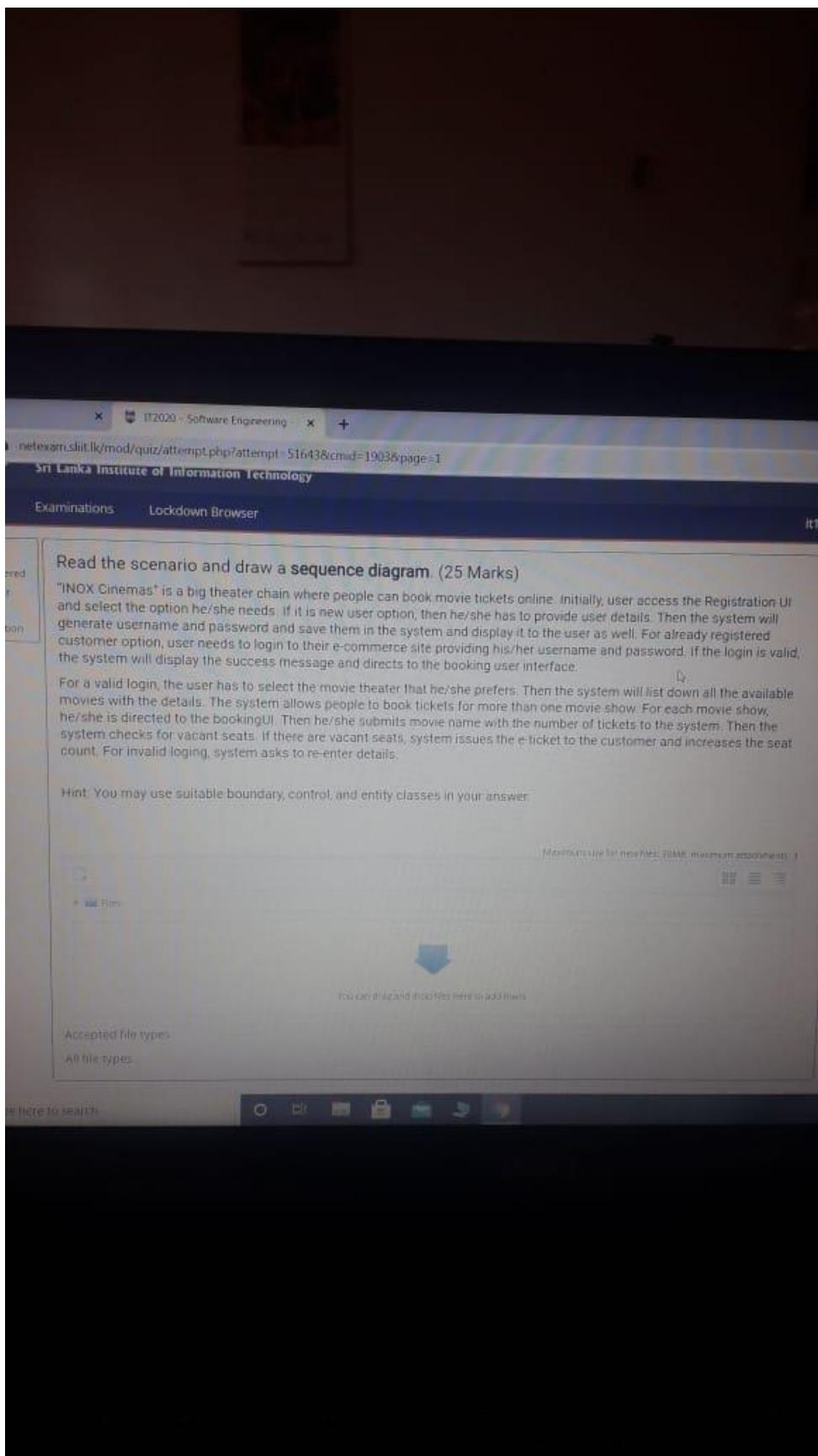
Uni_UI Component contains all the user interfaces of this system. It is also deployed in the same web server. Uni_UI component is responsible to create Uni interface, which used by the mobile and desktop devices to connect with the backend. Also, Uni_UI component uses Student, Lecturer and Module components through iStudent, iLecturer and iModule interfaces, respectively.

The Admin application of the E-Uni system was deployed in a separate hardware server. Admin application consists of two sub applications, HR and Students_Affairs. Admin application communicate with Uni_UI component via iAdmin interface implemented by Admin application. HR and Students_Affairs sub applications connected with each other via iHR interface implemented by HR sub application.

Mobile user and desktop user connected to the Lenovo ThinkSystemSR590 Server and Lenovo ThinkSystemSR590 Server connected to Hardware Server via LAN.

BullC





Given below is a detailed description of a web-based application developed for an online University Management system "E-Uni". Model a **physical diagram** for the following description. (25 Marks)

Note: You MUST use appropriate operating systems in required places.

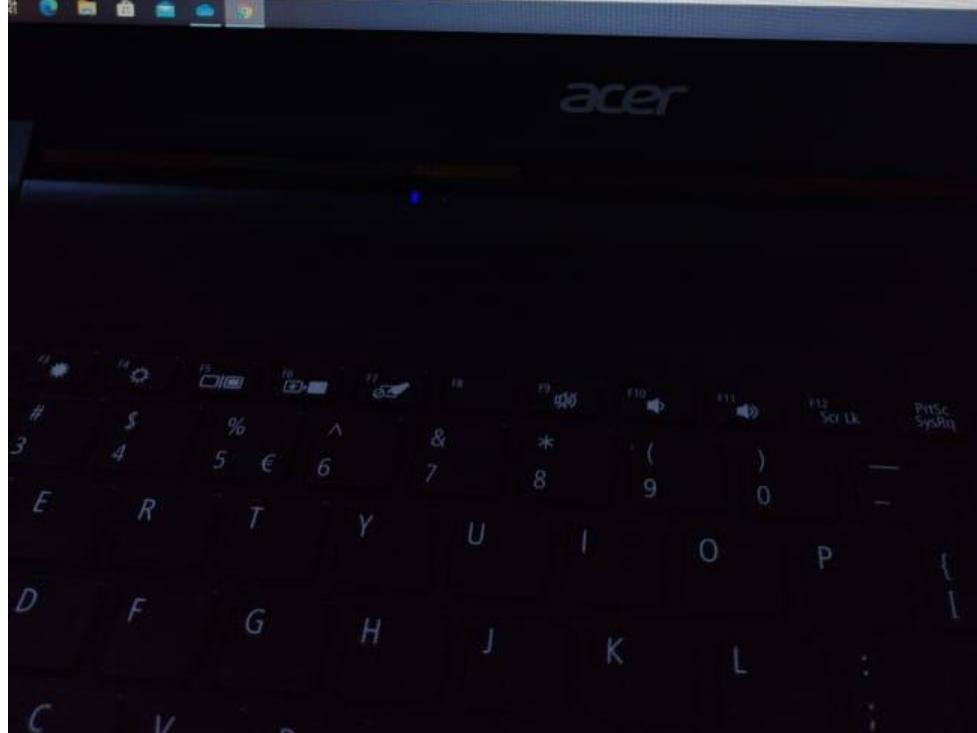
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The main application of E-Uni runs in a web server, which deployed in Lenovo ThinkSystemSR590 Server. The E-Uni application contains three subcomponents: Student, Lecturer and Module. The Student component implements iStudent interface used by both Lecturer and Module components. The Student component facilitates to handle all the information and activities relates to students while Lecturer and Module components handle all the activities and information related to lectures and modules.

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Mobile user and desktop user connected to the Lenovo ThinkSystemSR590 Server and Lenovo ThinkSystemSR590 Server connected to Hardware Server via LAN.





You want to model the following situation: A home delivery service has the two states wait and deliver. At the beginning, wait is active. As soon as a customer has ordered a product, a transition to deliver takes place. During the transition, the order is processed. deliver stays active until the product has been delivered to the customer, then a transition to wait happens. How do you have to specify the transition from wait to deliver?

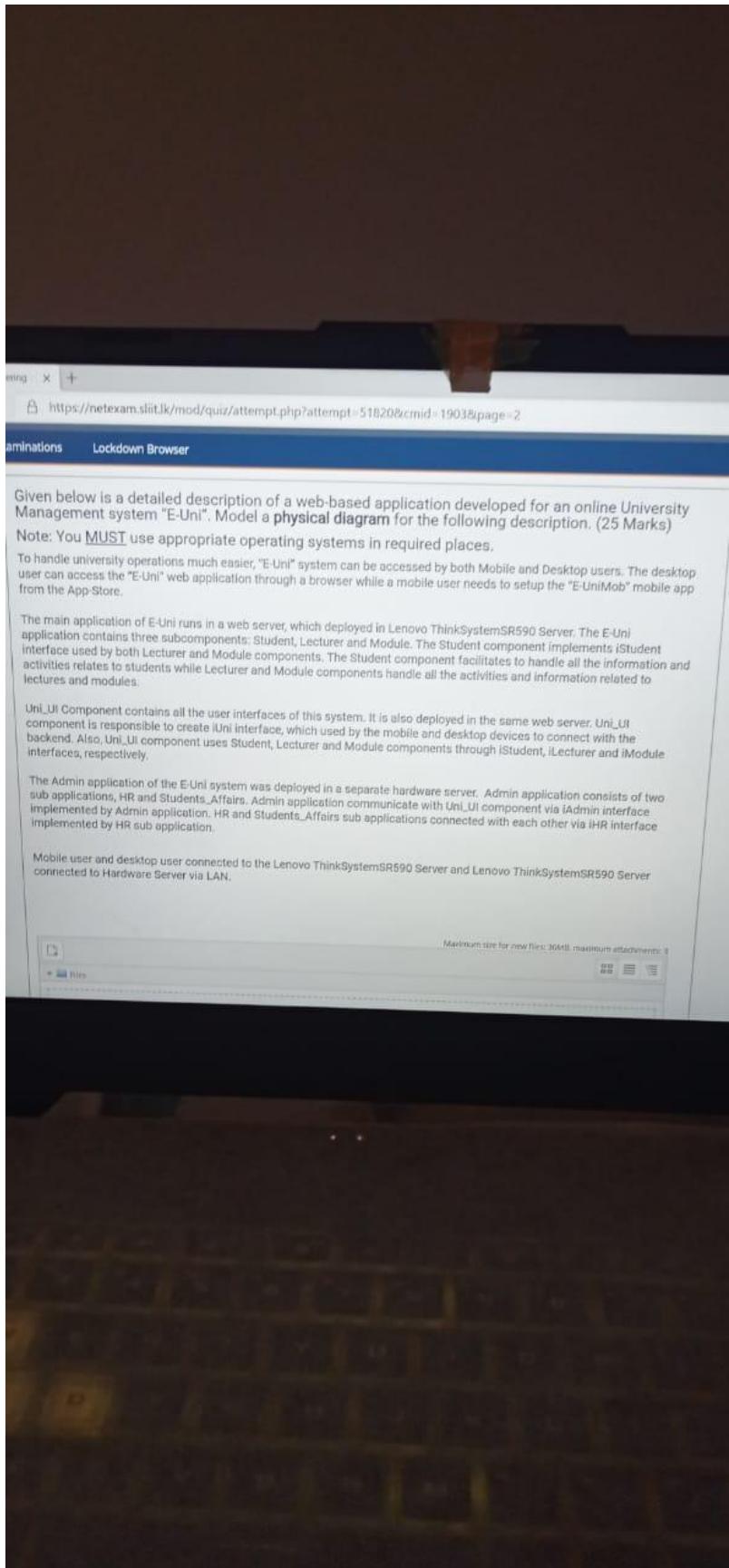
Select one:

- i. /process order
- ii. [order received]/process order
- iii. order received [process order]
- iv. [order received]/order is processed
- v. order received/process order



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Question 22
Not yet answered
Marked out of 1.00
 Flag question

Select the **Correct statement/s** on the given state chart diagram.

```

stateDiagram-v2
    [*] --> Idle : 
    Idle -- "when(card slot is empty)" --> Cancellation : entry / eject ATM card, do / show error message
    Idle -- "insert ATM card" --> CardCheck : 
    CardCheck -- "do / check card" --> Vending : 
    Vending -- "when(outstanding<=0)" --> Order : exit / eject change, eject cigarettes
    Order -- "entry / outstanding = outstanding - inserted, do / show outstanding" --> Vending : 
    Order -- "money" --> Order
  
```

Select one or more:

- i. When money occurs, only the do activities are executed
- ii. Order is a composite state
- iii. Money is an event
- iv. When money occurs, all the activities within the order state executed once again
- v. Self-transitions are used to restart the state

IT2020 – Software Engineering +

<https://netexam.sliit.lk/mod/quiz/attemp.php?attempt=517678&cmid=1903&page=1>

Dashboard Examinations Lockdown Browser it190189

Question 1
Not yet answered
Marked out of 25.00
 Flag question

Read the scenario and draw a sequence diagram. (25 Marks)

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save them in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

For a valid login, the user has to select the movie theater that he/she prefers. Then the system will list down all the available movies with the details. The system allows people to book tickets for more than one movie show. For each movie show, he/she is directed to the bookingUI. Then he/she submits movie name with the number of tickets to the system. Then the system checks for vacant seats. If there are vacant seats, system issues the e-ticket to the customer and increases the seat count. For invalid logging, system asks to re-enter details.

Hint: You may use suitable boundary, control, and entity classes in your answer.

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Files

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Sri Lanka Institute of Information Technology

Dashboard Examinations Lockdown Browser it18020236 Y.R.S. Nadeeshani it18020236 15:43:32

Question 1
Not yet answered
Marked out of 25.00
Flag question

Read the scenario and draw a sequence diagram. (25 Marks)

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save them in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

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Hint: You may use suitable boundary, control, and entity classes in your answer.

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Files

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Select the correct statement/s about the given partial state chart diagram.

```
graph LR; Start1(( )) --> Sched[scheduling]; Sched --> End1((( )));
Start2(( )) --> Holiday[holiday planning]; Holiday --> End2((( )));
Start3(( )) --> Instructions[giving instructions]; Instructions --> End3((( )));
Start1 --> End3;
Start2 --> End3;
Start3 --> End3;
```

Select one or more:

- i. Consulting is completed when it has scheduled, holiday planned and given the instructions.
- ii. Consulting is an orthogonal composite state with three sequential states.
- iii. Consulting is an orthogonal composite state with three parallel states.
- iv. Consulting is a simple composite state with three parallel states.
- v. State can contain sub states.

Read the scenario and draw a sequence diagram. (25 Marks)

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save them in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

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Hint: You may use suitable boundary, control, and entity classes in your answer.

Maximum size for new files: 30MB, maximum attachments: 3

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Question 19
Not yet answered
Marked out of 1.00
Flag question

You are given a state machine diagram. What is the value of "number" variable after the occurrence of the following event chain in the given order?

1. start(6)
2. after(5 seconds)
3. restart(number*2)
4. off()

```

graph LR
    Start(( )) -- start(6) --> ON[ON]
    ON -- "entry/number ++  
do/ number *3  
exit/number --" --> OFF[OFF]
    ON -- "when  
(operation  
completed)" --> OFF
    OFF -- "after (5  
seconds)" --> OFF
    OFF -- restart(number*2) --> OFF
    OFF -- off() --> ON
    
```

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COMMENTS AND CONCERN
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State Examination
Sri Lanka Institute of Information Technology

What is/are correct about the given state.

```
graph TD; ON --> Idle; ON --> Rewinding; ON --> Playing; Idle -- rew --> Rewinding; Idle -- stop --> Playing; Rewinding -- stop --> Playing; Playing -- play --> Idle
```

Select one or more:

- I. ON is a super state.
- II. ON is a simple composite state.
- III. ON is a concurrent state.
- IV. play, rew and stop are actions.
- V. Its state is invalid because it is not containing a final state.

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What is/are correct about the given state.

ON

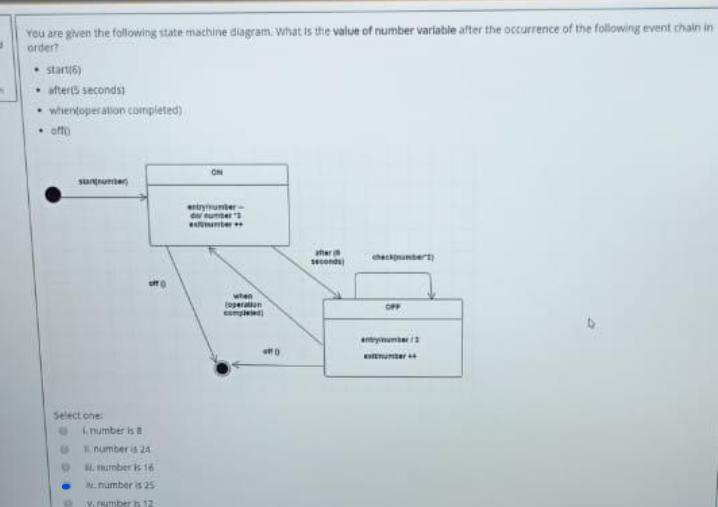
```
graph LR; Idle((Idle)) -- rew --> Rewinding((Rewinding)); Idle -- play --> Playing((Playing)); Rewinding -- stop --> Idle; Playing -- stop --> Idle;
```

Select one or more:

i. ON is a super state.
 ii. ON is a concurrent state
 iii. ON is a simple composite state.
 iv. This state is invalid because it is not containing a final state.
 v. play, rew and stop are actions.

You are given the following state machine diagram. What is the value of number variable after the occurrence of the following event chain in order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()



Select one:

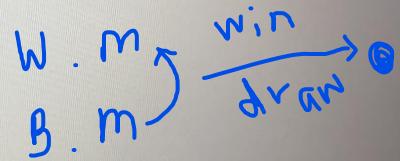
- i. number is 8
- ii. number is 24
- iii. number is 16
- iv. number is 25
- v. number is 12

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In a chess game always white moves first. After that black can move and then white again. This can happen until black or white win the games, black or white draw the game or black or white lost the game. Identify the states of the chess game according to the given description.

Select one or more:

- i. White move, Black move, Start move, End move
- ii. Move, Win, Lost, Draw
- iii. White move, Black move, White win, Black win, Draw
- iv. White move, Black move, Win, Lost
- v. White move, Black move, Win, Lost, Draw



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Which of the following statement/s about state machine diagrams is/are true?

Select one or more:

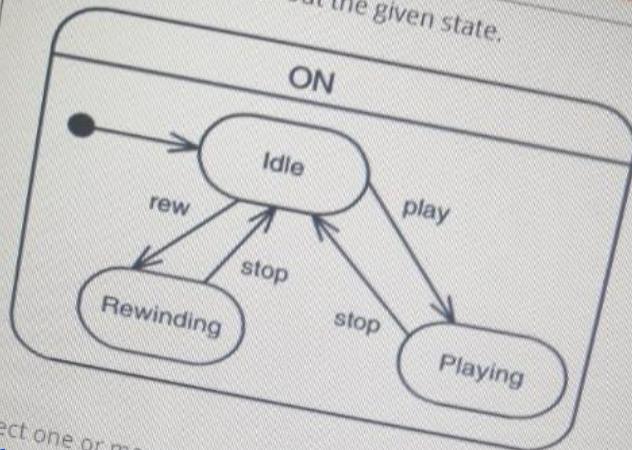
- i. A state may be divided into regions containing sub-states that exist and execute concurrently.
- ii. when(date=31.12.2007) is a so-called time event
- iii. The initial state has exactly one outgoing and any number of incoming transitions.
- iv. Do-activities within states cannot be aborted by any event.
- v. Internal behaviour compartment contains behaviours that they do not cause a change of state.

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Question 1
1 answered
1 out of
question

What is/are correct about the given state.



Select one or more:

- i. ON is a super state.
- ii. ON is a simple composite state.
- iii. play, rew and stop are actions.
- iv. ON is a concurrent state.
- v. This state is invalid because it is not containing a final state.

F3
PgUp

F4
PgDn

F5

ace

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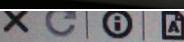
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Mobile user and desktop user connected to the Lenovo ThinkSystemSR590 Server and Lenovo ThinkSystemSR590 Server connected to Hardware Server via LAN.

Search



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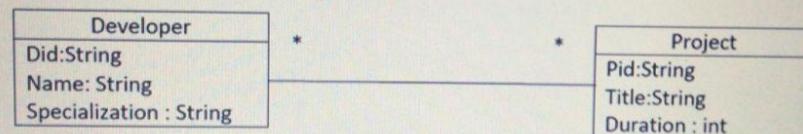
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et answered

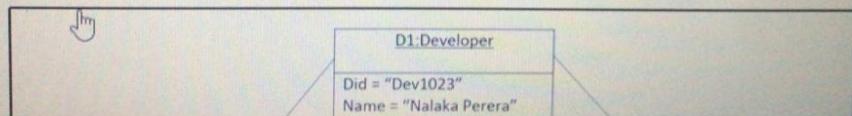
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ng question

Select the correct object diagram for the given class diagram.



Select one:

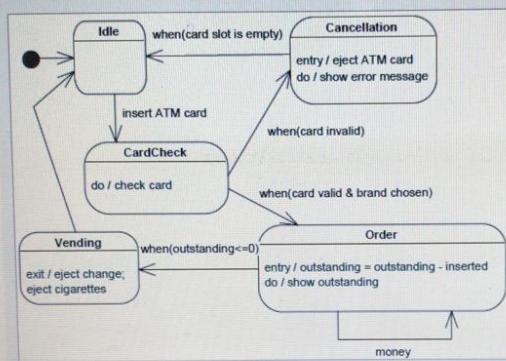


Question 19

Not yet answered
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Flag question

You are given the following state machine diagram. Which of the following statement/s is/are correct?



Select one or more:

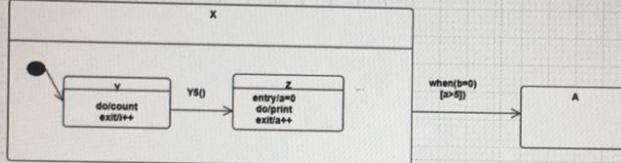
- i. If CardCheck is active and the card is valid, Order immediately becomes the next active state.
- ii. As soon as change and cigarettes have been ejected, Idle becomes the next active state.
- iii. After the customer has inserted enough money into the machine, a transition to Vending takes place.
- iv. The machine has a transition from Vending to Idle. It would also be possible to model a transition from Vending to the initial state (which directly links further to Idle).
- v. After the customer has inserted enough money into the machine, a transition to Order takes place.

Question 7

Not yet answered
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Flag question

You are given the following state machine diagram. Assuming the active state is state Y, event b>0 occurs and a>5 becomes true, what happens next?



Select one:

- i. As soon as all activities from state Y and Z are completed, A becomes the next active state.
- ii. As soon as the exit-activity of state Y is executing and state A becomes the next active state. If do-activities are currently executed, they are terminated.
- iii. If do-activities are currently executing, A cannot be the next active state because do-activities cannot be terminated.
- iv. As soon as the ongoing activity is completed, A becomes the next active state.
- v. As soon as the exit-activity of state A is completed, A becomes the next active state.

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You are given the following state machine diagram. Which of the following statement/s is/are **correct**?

```
graph LR; Start(( )) --> Idle[Idle]; Idle -- "when(card slot is empty)" --> Cancellation[Cancellation]; Idle -- "insert ATM card" --> CardCheck[CardCheck]; CardCheck -- "do / check card" --> Vending[Vending]; CardCheck -- "when(card invalid)" --> Cancellation; Vending -- "when(outstanding<=0)" --> Order[Order]; Vending -- "exit / eject change, eject cigarettes" --> Cancellation; Order -- "entry / outstanding = outstanding - inserted" --> money[money]; Order -- "do / show outstanding" --> Cancellation;
```

Select one or more:

- i. The machine has a transition from Vending to Idle. It would also be possible to model a transition from Vending to the initial state (which directly links further to idle).
- ii. After the customer has inserted enough money into the machine, a transition to Order takes place.
- iii. After the customer has inserted enough money into the machine, a transition to Vending takes place.
- iv. If CardCheck is active and the card is valid, Order immediately becomes the next active state.
- v. As soon as change and cigarettes have been ejected, Idle becomes the next active state.

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Question 14
Not yet answered
Marked out of 1.00
Flag question

"UKExpress" is a company which allows its customers to order online. There are two types of orders: Normal and VIP. Customers need to provide their name and shipping address to order products. Each order is having weight and price. Only VIP orders include VIP code. For each VIP order there must be a local agent. Local agent has agent ID and name.

What is/are the correct object diagram/s according to the above scenario?

Select one or more:

C1:Customer
Name = "Amitha Herath"
ShipAddress = "Colombo"

NO1:Normal Order
Price = 2000.00
Weight = "12kg"

NO2:Normal Order
Price = 2000.00
Weight = "12kg"

NO3:Normal Order
Price = 2000.00
Weight = "12kg"

27 28 29 30
COMMENTS AND
31
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ii. None of the diagrams are correct

iii.

E1:Employee
Eid = "Emp10011"
Name = "Amal Perera"
Age = 45
DoB = 11/2/1975

iv.

E1:Employee
Eid = Emp10011
Name = Amal Perera
Age = 45
DoB = 11/2/1975

v.

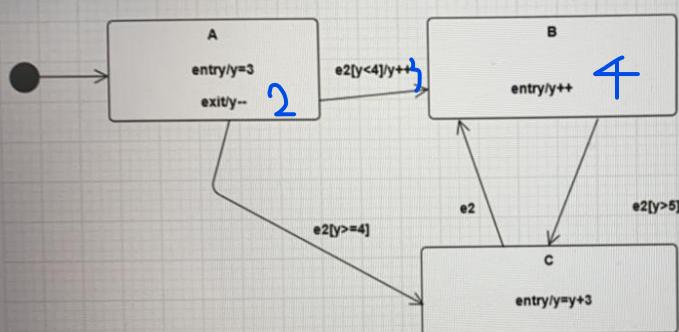
: Employee
Eid = "Emp10011"
Name = "Amal Perera"
Age = 45
DoB = 11/2/1975

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Question 19
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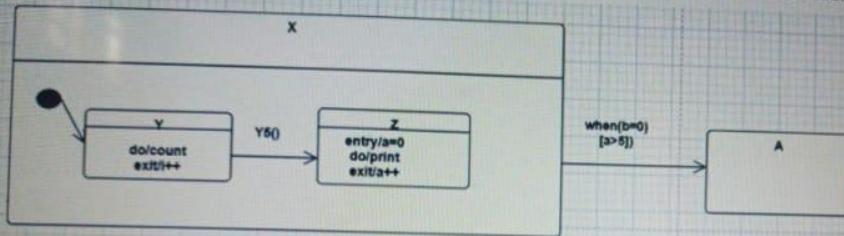
You are given the following state machine diagram. Assume that the active state is A. What is the **value of y variable** after the occurrence of the event chain e2, e2?



Select one:

- i. y is 5
- ii. y is 0
- iii. y is 2
- iv. y is 3
- v. y is 4

You are given the following state machine diagram. When does a transition to state A occur?



Select one:

- i. As soon as all effects within state Z are finished.
- ii. As soon as b=0
- iii. As soon as the event a>5 occurs and the guard is evaluated to true.
- iv. As soon as all effects within states Y and Z are finished.
- v. As soon as b=0 and "a" exceeds the value 5.

NetEx III
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You are given the following state machine diagram. B is definitely left if.....

Question 13
Not yet answered
Marked out of 1.00
Flag question

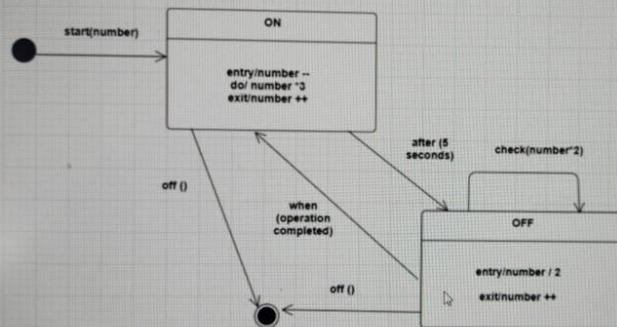
Select one or more:

- i. event e1 occurs.
- ii. one of the two final states are reached.
- iii. After B2 state completes.
- iv. the two orthogonal regions have reached their final states.
- v. event e2 occurs



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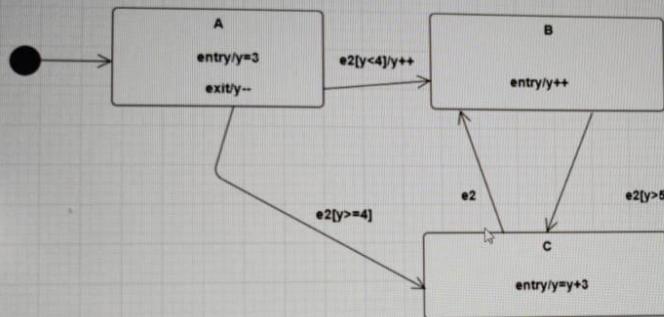
- start(6)
- after(5 seconds)
- when(operation completed)
- off()



Select one:

- i. number is 12
- ii. number is 25
- iii. number is 16
- iv. number is 24
- v. number is 8

You are given the following state machine diagram. Assume that the active state is A. What is the value of y variable after the occurrence of the event chain e2, e2?



Select one:

- i. y is 3
- ii. y is 5
- iii. y is 2
- iv. y is 4
- v. y is 0

☰ Quiz na

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17 18
25 26
COMMENTS
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Time left 0:1

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Question 1
Not yet answered
Marked out of 1.00
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You are given the following state machine diagram. What is the value of **number** variable after the occurrence of the following event chain in order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()

```

graph LR
    Start(( )) -- "start(6)" --> ON[ON]
    ON -- "off()" --> End(( ))
    End -- "when(operation completed)" --> OFF[OFF]
    OFF -- "after(5 seconds)" --> ON
    ON -- "check(number*2)" --> OFF
    
```

Select one:

- i. number is 8
- ii. number is 25
- iii. number is 16
- iv. number is 24
- v. number is 12

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COMMENTS AND CONCERNS
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Time left 1:03:09

Question 7
Not yet answered
Marked out of 1.00
[Flag question](#)

You are given the following state machine diagram. Assume that the active state is A. What is the value of **y** variable after the occurrence of the event chain e2, e2?

```

graph LR
    Start(( )) --> A[A]
    A -- "e2[y<4] y++" --> B[B]
    A -- "e2[y>=4]" --> A
    B -- "e2" --> C[C]
    C -- "entry/y=y+3" --> C
    
```

Select one:

- i. y is 0
- ii. y is 8
- iii. y is 7
- iv. y is 5
- v. y is 4

Quiz navigation

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9	10	11
17	18	19
25	26	27

COMMENTS AN
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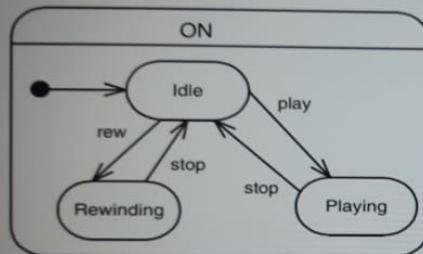
Finish attempt ...
Time left 0:36:24



Question 15

Not yet answered
Marked out of
1.00 Flag question

What is/are correct about the given state.



Select one or more:

- i. ON is a concurrent state
- ii. This state is invalid because it is not containing a final state.
- iii. ON is a simple composite state.
- iv. ON is a super state.
- v. play, rew and stop are actions.

You are given the following state machine diagram. It is definitely left if.....

```

graph LR
    Start(( )) --> S1A
    S1A --> S2A
    S2A --> S3A
    S3A --> S4A(( ))
    S4A --> S1B
    S1B --> S5B
    S5B --> S6B
    S6B --> S7B
    S7B --> S8B(( ))
    S8B --> S1A
    S4A -- e1 --> S1B
    S8B -- e2 --> S1A
    S1B -- e1 --> S5B
    S1B -- e2 --> S8B
  
```

Select one or more:

- i. After S2 state completes.
- ii. event e1 occurs.
- iii. one of the two final states are reached.
- iv. event e2 occurs.
- v. the two orthogonal regions have reached their final states.



Question 15

Not yet answered
Marked out of
1.00

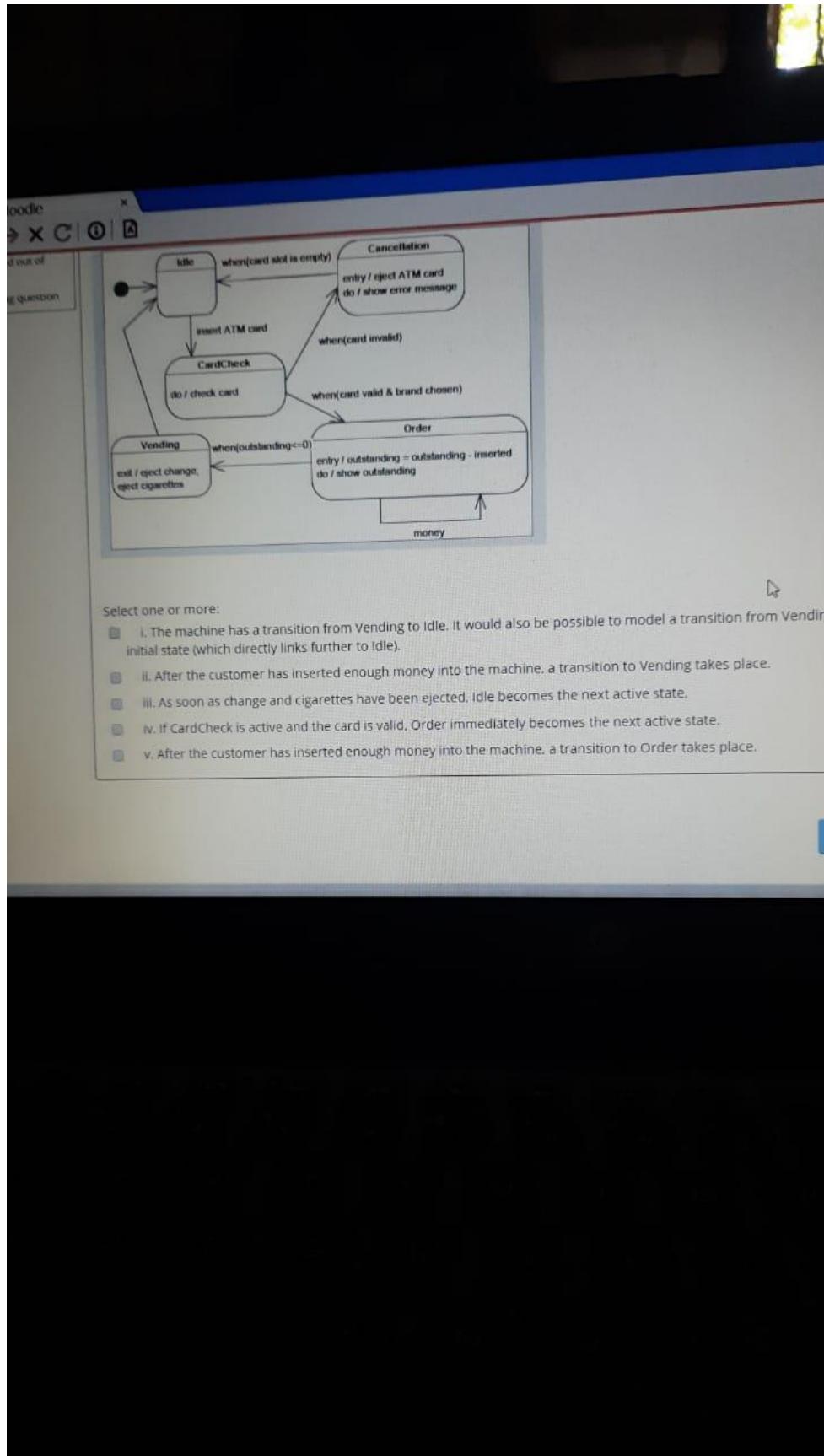
[Flag question](#)

You want to model the following situation: A home delivery service has the two states wait and deliver. At the beginning, wait is active. As soon as a customer has ordered a product, a transition to deliver takes place. During the transition, the order is processed. deliver stays active until the product has been delivered to the customer, then a transition to wait happens. How do you have to specify the transition from wait to deliver?

Select one:

- i. order received [process] order
- ii. [order received]/order is processed
- iii. [order received]/process order
- iv. order received/process order
- v. ./process order

[Next page](#)



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Question 17
Not yet answered
Marked out of 1.00
[Flag question](#)

You are given the following state machine diagram. B is definitely left if.....

```

graph LR
    A((A)) --> B1((B1))
    A --> B3((B3))
    B1 --> B2((B2))
    B3 --> B4((B4))
    B2 --> FS1((( ))
    B4 --> FS2((( ))
    FS1 -- e2 --> C2((C2))
    FS2 -- e1 --> C1((C1))
    FS1 -- e1 --> C1
    FS2 -- e2 --> C2
  
```

Select one or more:

- i. event e2 occurs.
- ii. event e1 occurs.
- iii. the two orthogonal regions have reached their final states.
- iv. one of the two final states are reached.
- v. After B2 state completes.

[Next page](#)

Not yet answered
Marked out of 1.00
[Flag question](#)

You are given the following state machine diagram. What is the value of number variable after the occurrence of the following event chain in order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()

```

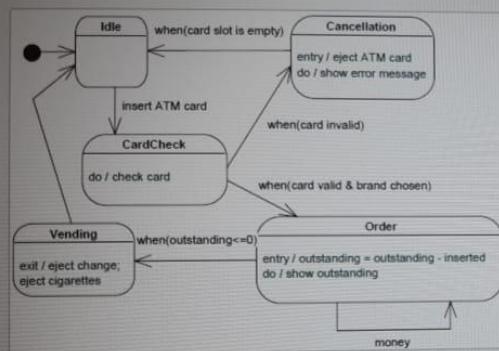
graph LR
    Start(( )) -- start(6) --> ON[ON  
entry/number -= 1  
exit/number ++]
    ON -- off() --> FS1((( ))
    ON -- "when(operation completed)" --> FS2((( ))
    ON -- after(5 seconds) --> OFF[OFF  
entry/number / 2  
exit/number ++]
    OFF -- off() --> Start
  
```

Select one:

- i. number is 16
- ii. number is 8
- iii. number is 12
- iv. number is 25

Question 17
Not yet answered
Marked out of 1.00
Flag question

You are given the following state machine diagram. Which of the following statement/s is/are **correct**?



☰ Quiz

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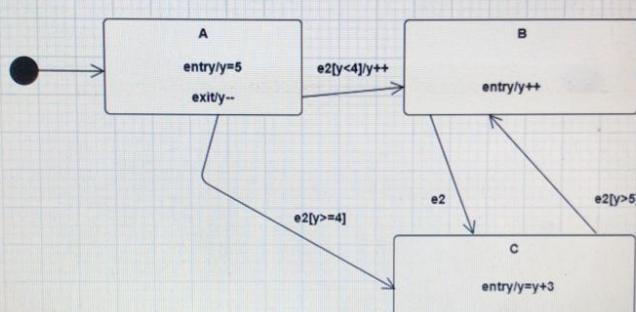
Select one or more:

- i. After the customer has inserted enough money into the machine, a transition to Order takes place.
- ii. The machine has a transition from Vending to Idle. It would also be possible to model a transition from Vending to the initial state (which directly links further to Idle).
- iii. After the customer has inserted enough money into the machine, a transition to Vending takes place.
- iv. As soon as change and cigarettes have been ejected, Idle becomes the next active state.
- v. If CardCheck is active and the card is valid, Order immediately becomes the next active state.

Question 20

Not yet answered
Marked out of 1.00
Flag question

You are given the following state machine diagram. Assume that the active state is A. What is the **value of y variable** after the occurrence of the event chain e2, e2?



Select one:

- i. y is 0
- ii. y is 5
- iii. y is 4
- iv. y is 8
- v. y is 7

Seats can be reserved by participants on the web site of the musical show in next week. The participant has the option to directly pay for the seat through the website. In that case, the seat cannot be cancelled. If the customer has not paid for the seat, the organisers can cancel the seat if the participant does not show up one hour before the show. When the reservation is cancelled, the seat will become free and can be sold to another participant.

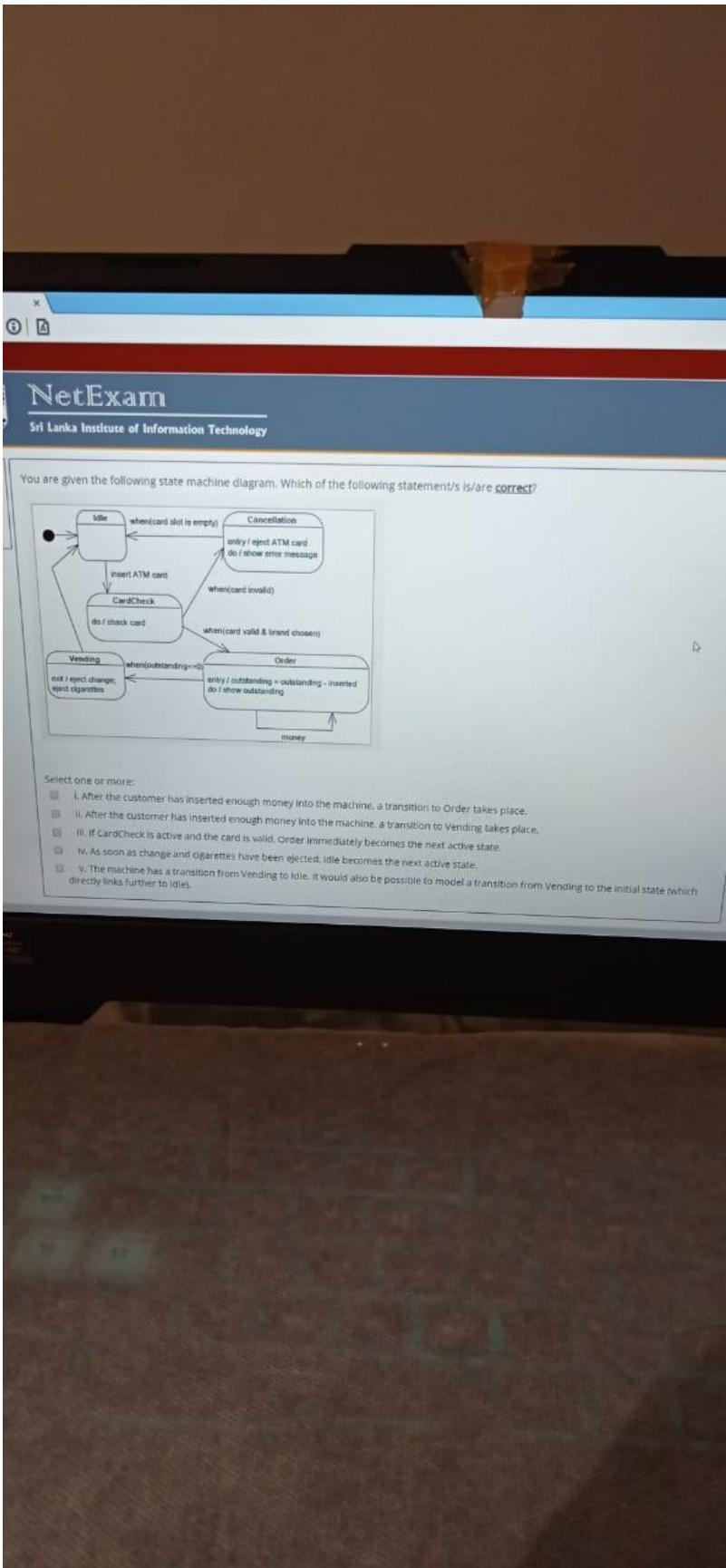
Identify the states of the seat object according to the given description.



Select one:

- i. Paid, Cancelled
- ii. Seat, Free, Cancelled
- iii. Paid, Cancelled, Reserve, Free
- iv. Reserve, Paid
- v. Show, Paid, Cancelled, Reserve

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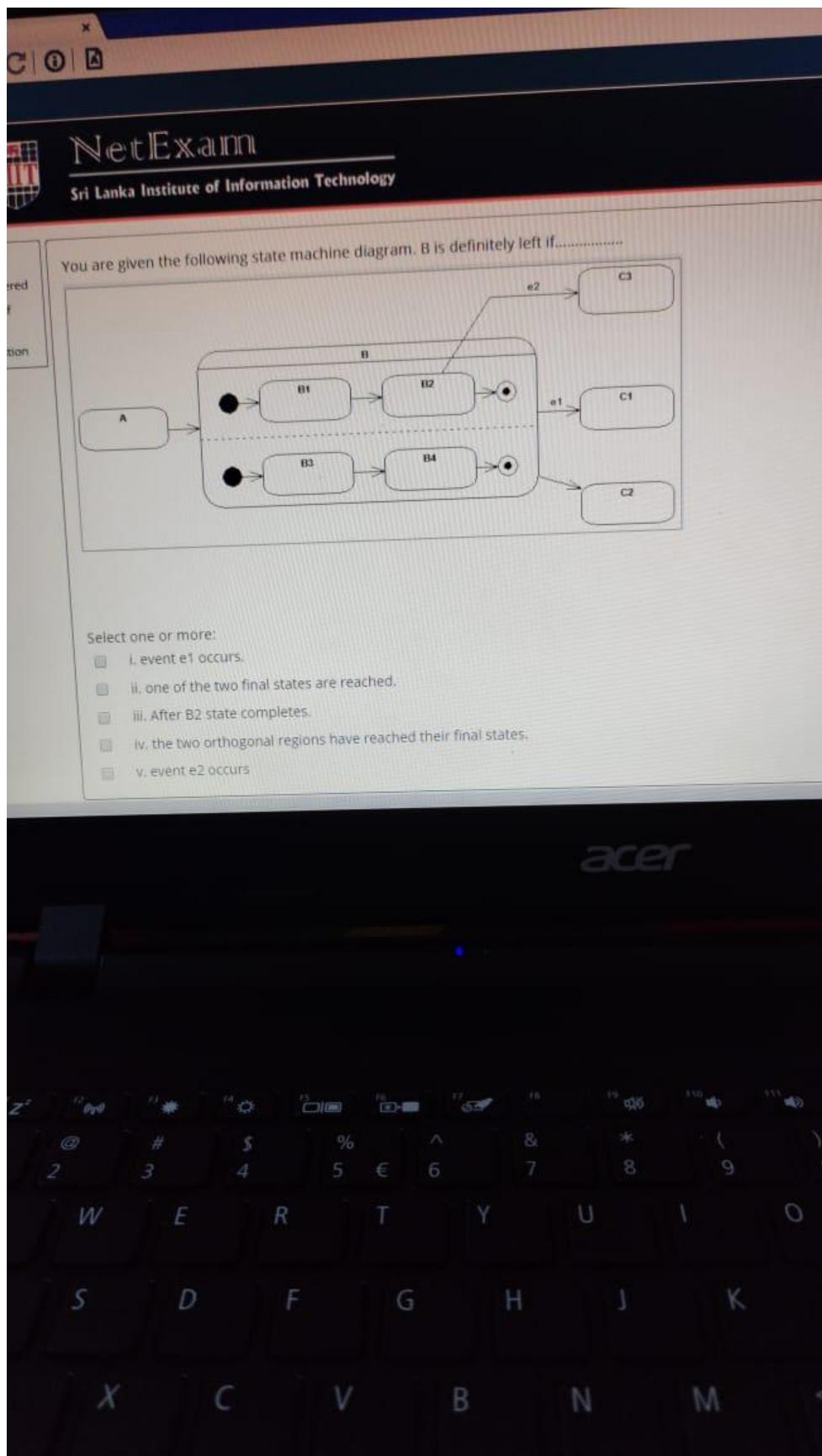
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Select the correct statement/s about the given partial state chart diagram.

```
graph LR; consulting[consulting] --- start1(( )); start1 --> scheduling1[scheduling]; scheduling1 --> end1(( )); consulting --- start2(( )); start2 --> holidayPlanning[holiday planning]; holidayPlanning --> end2(( )); consulting --- start3(( )); start3 --> givingInstructions[giving instructions]; givingInstructions --> end3(( ));
```

Select one or more:

- i. Consulting is completed when it has scheduled, holiday planned and given the instructions.
- ii. Consulting is an orthogonal composite state with three sequential states.
- iii. Consulting is an orthogonal composite state with three parallel states.
- iv. Consulting is a simple composite state with three parallel states.
- v. State can contain sub states.



Module 8

Question 9
Not yet answered
Marked out of 1.00
Flag question

You are given the following state machine diagram. What is the value of number variable after the occurrence of the following event chain in order?

- * start()
- * after(5 seconds)
- * when(operation completed)
- * off()

```
graph LR; Start(( )) -- "start()" --> ON[ON  
entrynumber = 0  
exitnumber = 1]; ON -- "off(0)" --> OFF[OFF  
entrynumber = 2  
exitnumber = 3]; OFF -- "when(operation completed)" --> ON; ON -- "after(5 seconds)" --> OFF; OFF -- "checknumber(2)" --> ON;
```

Select one:

- i. number is 25
- ii. number is 12
- iii. number is 24
- iv. number is 8
- v. number is 16

Quiz navigation

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
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COMMENTS AND CONCERNES

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Final attempt ...

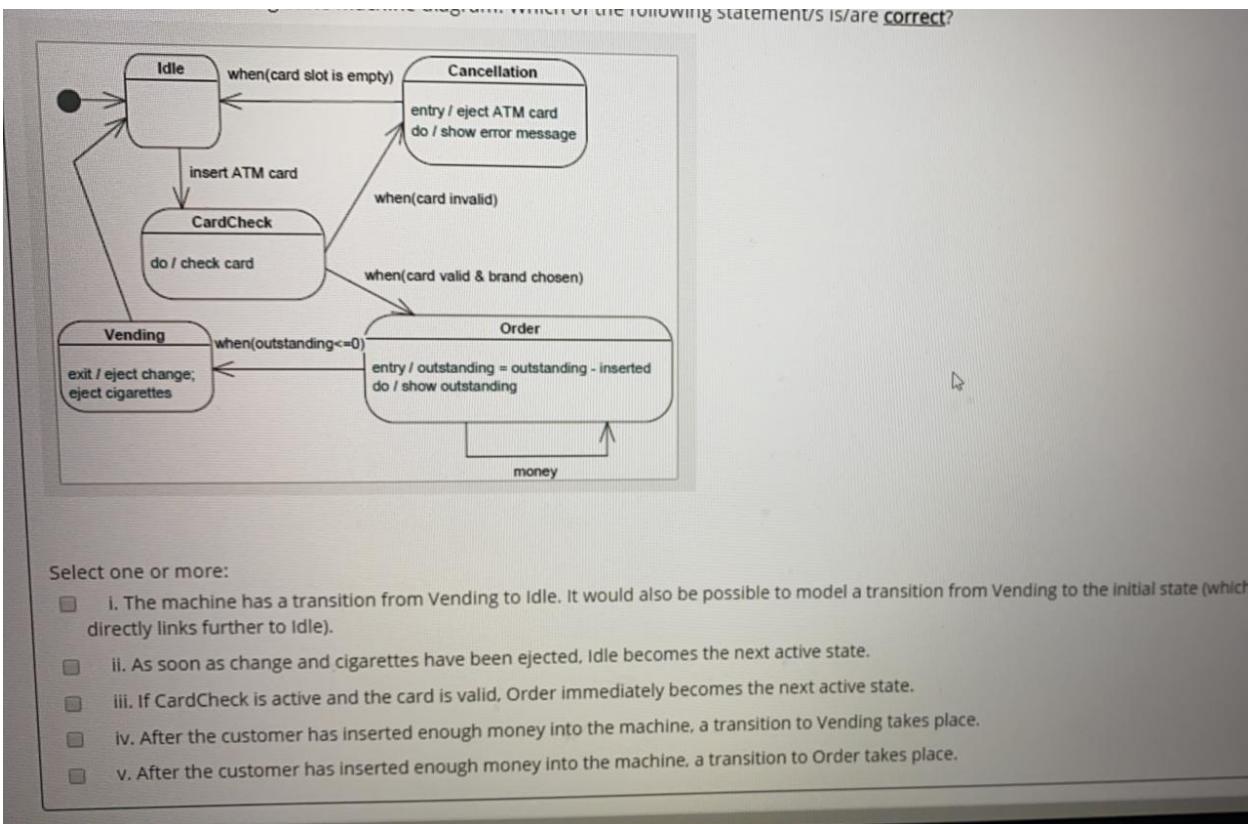
Time left 0:35:41

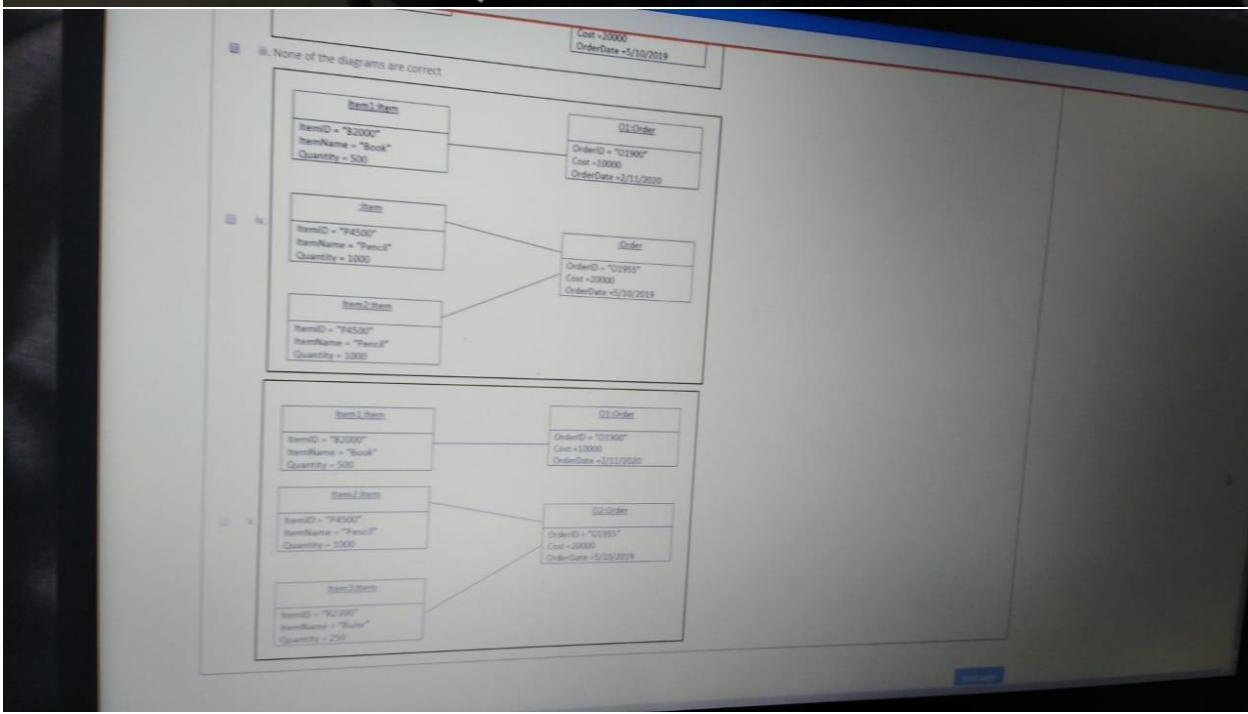
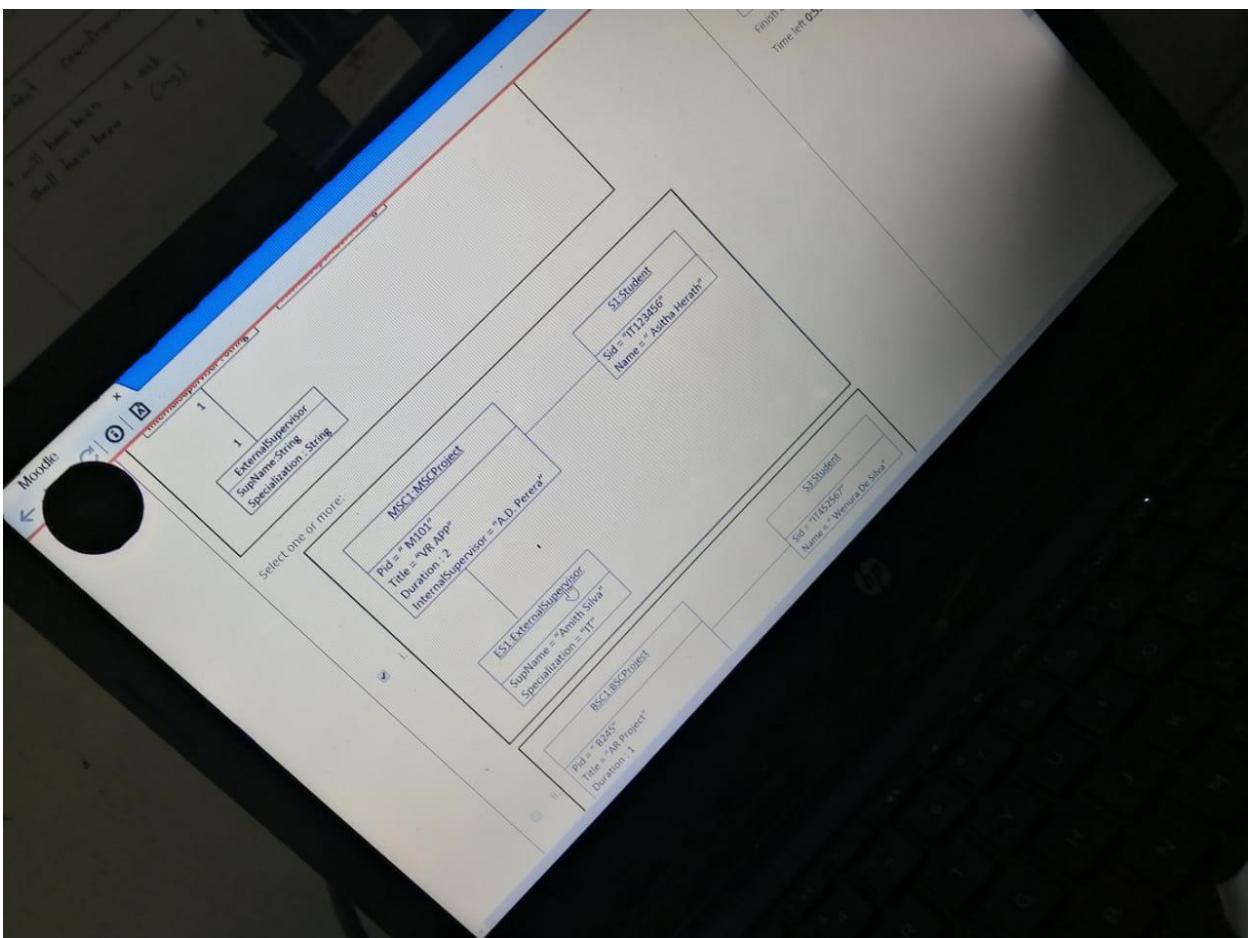
You are given the following state machine diagram. Assume that the active state is A. What is the value of y variable at the occurrence of the event chain e2, e2?

```
graph LR; Start(( )) --> A[A  
entry/y=3  
exit/y-]; A -- "e2[y<4]y++" --> B[B  
entry/y++]; A -- "e2[y>=4]" --> C[C  
entry/y=y+3]; B -- "e2" --> C; C -- "e2[y>5]" --> C;
```

Select one:

- I. y is 2
- II. y is 3
- III. y is 4
- IV. y is 5
- V. y is 0





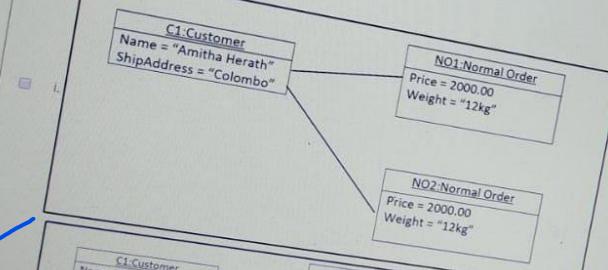


Question 3
Not yet answered
Marked out of 1.00
 Flag question

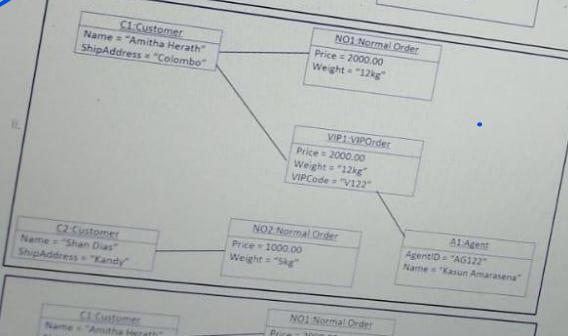
"UKExpress" is a company which allows its customers to order online. There are two types of orders Normal and VIP. Customers need to provide their name and shipping address to order products. Each order is having weight and price. Only VIP orders include VIP code. For each VIP order there must be a local agent. Local agent has agent ID and name.

What is/are the correct object diagram/s according to the above scenario?

Select one or more:



ii.



C1 Customer
Name = "Amitha Herath"
ShipAddress = "Colombo"

NO1 Normal Order
Price = 2000.00
Weight = "12kg"

VIP1 VIPOrder
Price = 2000.00
Weight = "12kg"
VIPCode = "V123"

NO2 Normal Order
Price = 2000.00
Weight = "12kg"

A1 Agent
AgentID = "AG123"
Name = "Kasun Amarasinga"

C2 Customer
Name = "Shan Dias"
ShipAddress = "Kandy"

NO2 Normal Order
Price = 1000.00
Weight = "5kg"

C1 Customer
Name = "Amitha Herath"
ShipAddress = "Colombo"

NO1 Normal Order
Price = 2000.00

Select the correct statement/s about the given partial state chart diagram.

```

graph TD
    consulting((consulting)) --> S1(( ))
    S1 --> scheduling[scheduling]
    scheduling --> F1((( )))
    consulting --> S2(( ))
    S2 --> holidayPlanning[holiday planning]
    holidayPlanning --> F2((( )))
    consulting --> S3(( ))
    S3 --> givingInstructions[giving instructions]
    givingInstructions --> F3((( )))
  
```

Select one or more:

- i. Consulting is completed when it has scheduled, holiday planned and given the instructions.
- ii. Consulting is a simple composite state with three parallel states.
- iii. State can contain sub states.
- iv. Consulting is an orthogonal composite state with three sequential states.
- v. Consulting is an orthogonal composite state with three parallel states.

You are given the following state machine diagram. When does a transition to state A occur?

```

graph LR
    X[x] --> Y[Y<br/>do/count<br/>exit/i++]
    Y -- "Y5()" --> Z[Z<br/>entry/a=0<br/>do/print<br/>exit/a++]
    Z -- "when(b=0)<br/>[a>5]" --> A[A]
  
```

Select one:

- i. As soon as b=0
- ii. As soon as all effects within state Z are finished.
- iii. As soon as all effects within states Y and Z are finished.
- iv. As soon as the event a>5 occurs and the guard is evaluated to true.
- v. As soon as b=0 and "a" exceeds the value 5.

Which of the following statement/s about state machine diagrams are true?

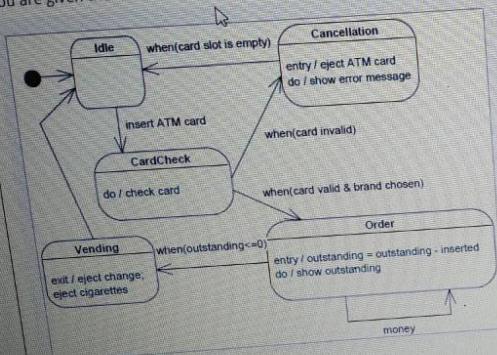
Select one or more:

- i.
The do-activity starts inside the state and continues until either the activity is completed or the state is exited.
- ii.
Events trigger transitions.
- iii.
An event triggering a transition that leaves the current state aborts the do-activity.
- iv.
do-activities within states cannot be aborted by any event.
- v.
Internal behaviours trigger transitions.

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You are given the following state machine diagram. Which of the following statement/s is/are correct?



Select one or more:

- i. As soon as change and cigarettes have been ejected, Idle becomes the next active state.
- ii. After the customer has inserted enough money into the machine, a transition to Vending takes place.
- iii. The machine has a transition from Vending to Idle. It would also be possible to model a transition from Vending to the initial state (which directly links further to Idle).
- iv. After the customer has inserted enough money into the machine, a transition to Order takes place.
- v. If CardCheck is active and the card is valid, Order immediately becomes the next active state.

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Which of the following statement/s about state machine diagrams are true?

Select one or more:

- I. do-activities within states cannot be aborted by any event.
- II. Internal behaviours trigger transitions.
- III. The do-activity starts inside the state and continues until either the activity is completed or the state is exited.
- IV. Events trigger transitions.
- V. An event triggering a transition that leaves the current state aborts the do-activity.

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Which of the following statement/s is/are true according to the given partial state diagram?

```
graph LR; A[A] -- "entry/number --" --> B[B]; B -- "entry/number / 2\nexit/number ++" --> A[e/e/number++]
```

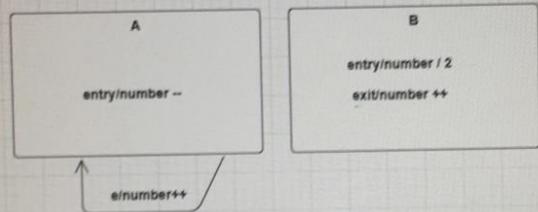
Select one or more:

- i. Internal transitions behave like normal transitions except that they do not cause a change of state.
- ii. The two images are equivalent.
- iii. In state B the entry-activity is executed only once.
- iv. In state A the entry-activity is executed every time the self-transition e occurs.
- v. The two images are not equivalent.

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Question 5
 Not yet answered
 Marked out of 1.00
 Flag question

Which of the following statement/s is/are true according to the given partial state diagram?



```

graph TD
    A["A<br>entry/number --<br>exit/number ++"] -- "e/number++" --> B["B<br>entry/number / 2<br>exit/number ++"]

```

A
`entry/number --`

B
`entry/number / 2`
`exit/number ++`

Select one or more:

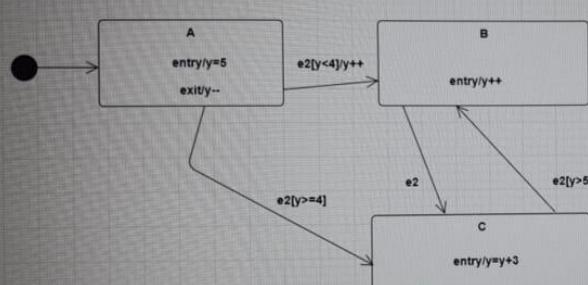
- i. The two images are not equivalent.
- ii. Internal transitions behave like normal transitions except that they do not cause a change of state.
- iii. In state A the entry-activity is executed every time the self-transition e occurs.
- iv. The two images are equivalent.
- v. In state B the entry-activity is executed only once.

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Section 5
 Not yet answered
 Marked out of 0
 Flag question

You are given the following state machine diagram. Assume that the active state is A. What is the value of y variable after the occurrence of the event chain e2, e2?



```

graph LR
    Start(( )) --> A["A<br>entry/y=5<br>exit/y--"]
    A -- "e2[y<4]/y++" --> B["B<br>entry/y++"]
    A -- "e2[y>=4]" --> C["C<br>entry/y=y+3"]
    B -- "e2" --> C
    B -- "e2[y>5]" --> C

```

A
`entry/y=5`
`exit/y--`

B
`entry/y++`

C
`entry/y=y+3`

Select one:

- i. y is 5
- ii. y is 0
- iii. y is 4
- iv. y is 8
- v. y is 7

Quiz navigation

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Finish attempt ...

Time left 0:53:20



Qn 7

Answered

1 out of

1 question

Which statement/s is/are correct regarding the object diagram?

Select one or more:

- i. Objects can be named or anonymous.
- ii. Methods are used in the object diagram.
- iii. We can declare objects without a class.
- iv. String values of the objects must indicate using double quotes.
- v. Object must have an object name.

In a chess game always white moves first. After that black can move and then white again. This can happen until black or white win the games, black or white draw the game or black or white lost the game. Identify the states of the chess game according to the given description.

Select one or more:

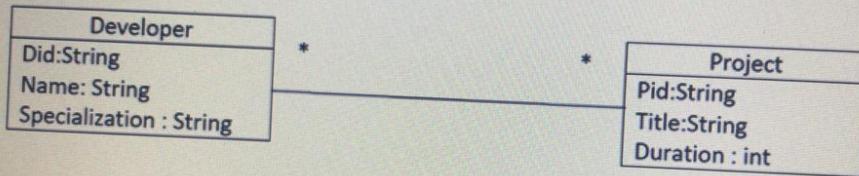
- i. White move, Black move, Start move, End move
- ii. White move, Black move, Win, Lost, Draw
- iii. White move, Black move, Win, Lost
- iv. White move, Black move, White win, Black win, Draw
- v. Move, Win, Lost, Draw

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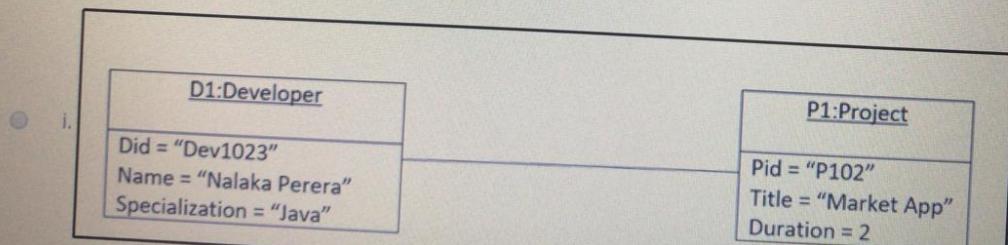


Answered
of
question

Select the correct object diagram for the given class diagram.



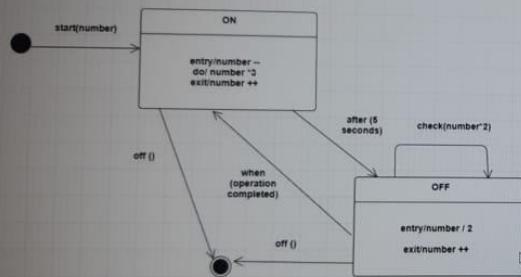
Select one:



Question 4
Not yet answered
Marked out of
1.00
 Flag question

You are given the following state machine diagram. What is the value of number variable after the occurrence of the following event chain in order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()



Select one:

- i. number is 8
- ii. number is 16
- iii. number is 24
- iv. number is 12
- v. number is 25

Quiz navigation

1	2	3	4	5	6	7	8
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17	18	19	20	21	22	23	24
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31							

COMMENTS AND CONCERNS

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Finish attempt ...

Time left 0:56:44

Marker out of 1.00

Flag question

1. start(6)
2. after(5 seconds)
3. restart(number*2)
4. off()

```

stateDiagram-v2
    [*] --> [*] : start(number)
    [*] --> [*] : when (operation completed)
    [*] --> [*] : after (5 seconds)
    [*] --> [*] : restart(number*2)
    [*] --> [*] : exit/number ++
  
```

Select one:

- i. number is 20
- ii. number is 5

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Which statement/s is/are correct regarding the object diagram?

Select one or more:

- i. Entire class diagram is represented in a single object diagram.
- ii. Object diagram shows a snapshot of a detailed state of a system.
- iii. It is a structural diagram. ↗
- iv. In an object diagram, attributes are associated with values.
- v. It is a structural diagram as well as a behavioral diagram.

You are given the following state machine diagram. B is definitely left if.....

```
graph LR; A((A)) --> B[ ]; B --- B1[ ]; B1 --> B2[ ]; B2 --> B1Final(( )); B --- B3[ ]; B3 --> B4[ ]; B4 --> B3Final(( )); B1Final -- e1 --> C1((C1)); B3Final -- e2 --> C3((C3)); B2Final -- e2 --> C3; B4Final -- e1 --> C2((C2))
```

Select one or more:

- i. After B2 state completes.
- ii. event e1 occurs.
- iii. one of the two final states are reached.
- iv. event e2 occurs.
- v. the two orthogonal regions have reached their final states.

Dashboard Examinations Lockdown Browser

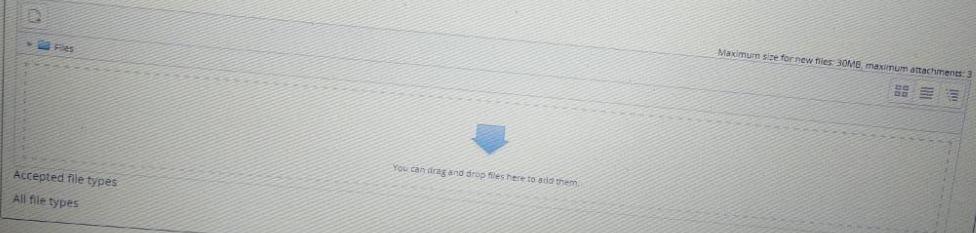
Question 1
Not yet answered
Marked out of 25.00
 Flag question

Read the scenario and draw a sequence diagram. (25 Marks)

"INOX Cinemas" is a big theater chain where people can book movie tickets online. Initially, user access the Registration UI and select the option he/she needs. If it is new user option, then he/she has to provide user details. Then the system will generate username and password and save them in the system and display it to the user as well. For already registered customer option, user needs to login to their e-commerce site providing his/her username and password. If the login is valid, the system will display the success message and directs to the booking user interface.

For a valid login, the user has to select the movie theater that he/she prefers. Then the system will list down all the available movies with the details. The system allows people to book tickets for more than one movie show. For each movie show, he/she is directed to the bookingUI. Then he/she submits movie name with the number of tickets to the system. Then the system checks for vacant seats. If there are vacant seats, system issues the e-ticket to the customer and increases the seat count. For invalid login, system asks to re-enter details.

Hint: You may use suitable boundary, control, and entity classes in your answer.



Maximum size for new files: 30MB, maximum attachments: 3

You can drag and drop files here to add them.

Accepted file types: All file types

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Question 1
Not yet answered
Marked out of 0.00
 Flag question

What is/are the **correct** statement/s about a communication diagram?

Select one or more:

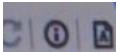
i. In a communication diagram assigning a message number to each message is a must.

ii. Sequence diagram and communication diagram represent the same information.

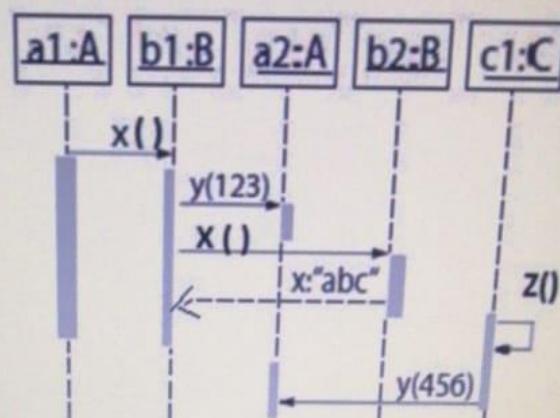
iii. In a communication diagram showing message direction is a not a must.

iv. Information represented by a communication diagram and sequence diagram is different.

v. In a communication diagram "asterisk" (*) is used to indicate a loop.



According to the following sequence diagram, which operation/s belongs to **Class A**?



Select one or more:

- i. Y():string
- ii. X():string
- iii. X():int
- iv. Z()
- v. Y():int

DELL



Which of the following difference/s between class diagrams and object diagrams is/are true?

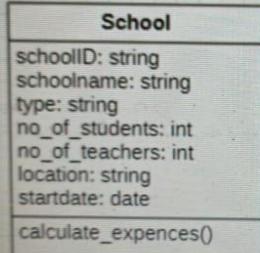
Select one or more:

- i. Class diagrams describe a system on type level, object diagrams on instance level.
- ii. Object notation does not have a method compartment.
- iii. Class diagrams model the structure of a system; object diagrams model the dynamic view.
- iv. Both diagram types are used for modeling the structural aspects of a system.
- v. Both class diagram and object diagram model for the whole system.

Followings are the parts of the object diagram for the given class diagram. identify the correct part/s of the corresponding object diagram.

S_r — S

| |
| |
* |



1 1 *

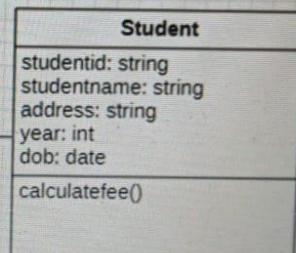


Diagram A

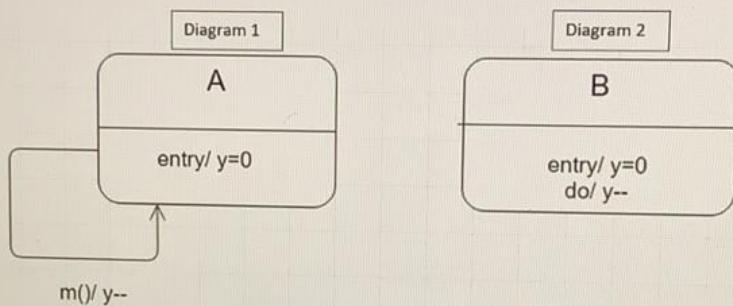
Diagram D

S1: School

St3: Student

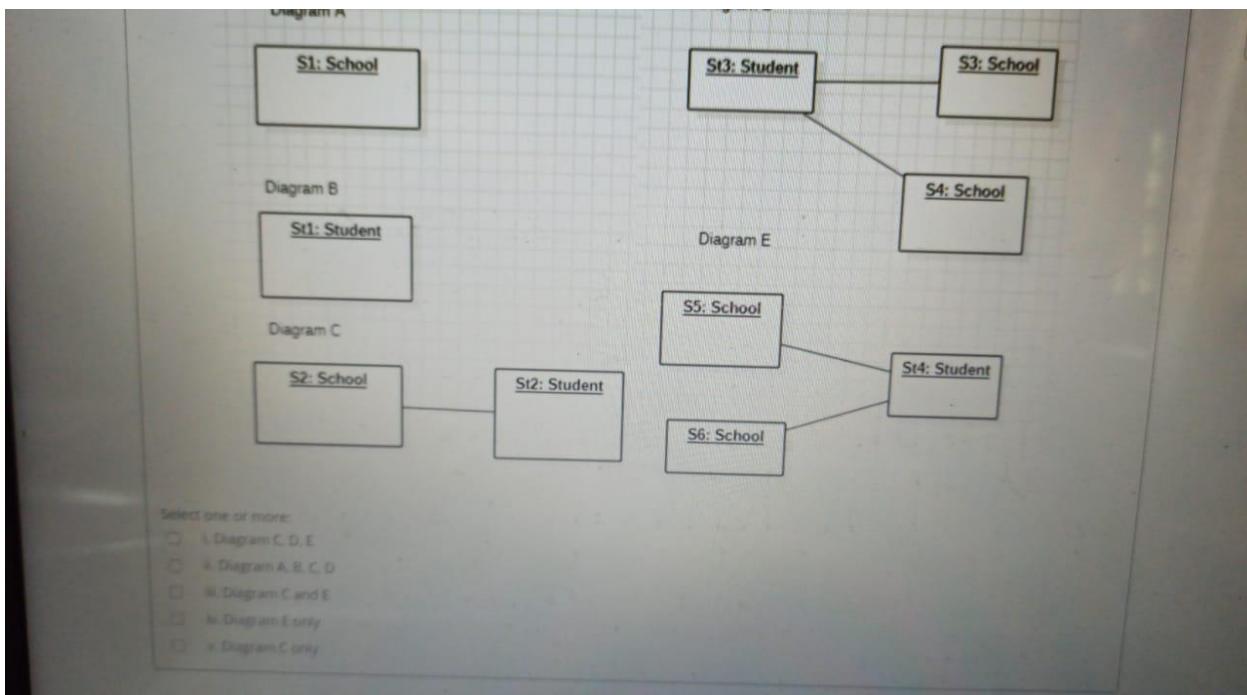
S3: School

Which of the following statements about the two given diagrams are **true**?



Select one or more:

- i. Diagram 2 the entry-activity is only executed once.
- ii. The two diagrams are not equivalent.
- iii. In Diagram 1, the entry-activity is executed every time when "m()/y--" occurs.
- iv. The two diagrams are equivalent.
- v. Diagram 2 the entry-activity is executed repeatedly with do activity.



← → × C | ① | ②

Marked out of 1.00
Flag question

Diagram A

Exam
examid: string examname: string duration: int no_of_students: int no_of_examiners: int location: string scheduledate: date expenses: double

Diagram B

E3_ Exam
examid = "mfl" examname = "mid examination" duration = 1 no_of_students = 120 no_of_examiners = 8 location = "LHC" scheduledate = 2021-03-4

Diagram C

E2_ Exam
examid = "75" examname = "final examination" duration = 1 no_of_students = 120 no_of_examiners = 8 location = "NLH" scheduledate = 2021-03-4

Diagram D

E3_ Exam
examid = "spott" examname = "spot test examination" duration = 1 no_of_students = 120 no_of_examiners = 8 location = "NLH" scheduledate = 2021-03-6

Diagram E

E1_ Exam
examid = "mfd" examname = "mid examination" duration = 1 no_of_students = 120 no_of_examiners = 8 location = "NLH" scheduledate = 2021-03-4

Diagram E

Exam: E5
examid = "f" examname = "final examination" duration = 3 no_of_students = 150 no_of_examiners = 10 location = "NLH" scheduledate = 2021-06-4

Finish attempt ...
Time left 0:56:29
INSTRUCTIONS
1 2 3 4
5 6 7 8
9 10 11 12
13 14 15 16
17 18 19 20
21 22 23 24
25 26 27 28
29 30 31
COMMENTS AND D

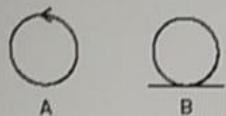
Select one:

- i. Diagram A and Diagram E
- ii. Diagram A and Diagram C
- iii. Diagram B, Diagram C, Diagram D
- iv. Diagram C and Diagram D
- v. Diagram A, Diagram B, Diagram C, Diagram D

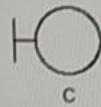
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Select the statements which is/are **true** about the stereotypes A,B and C



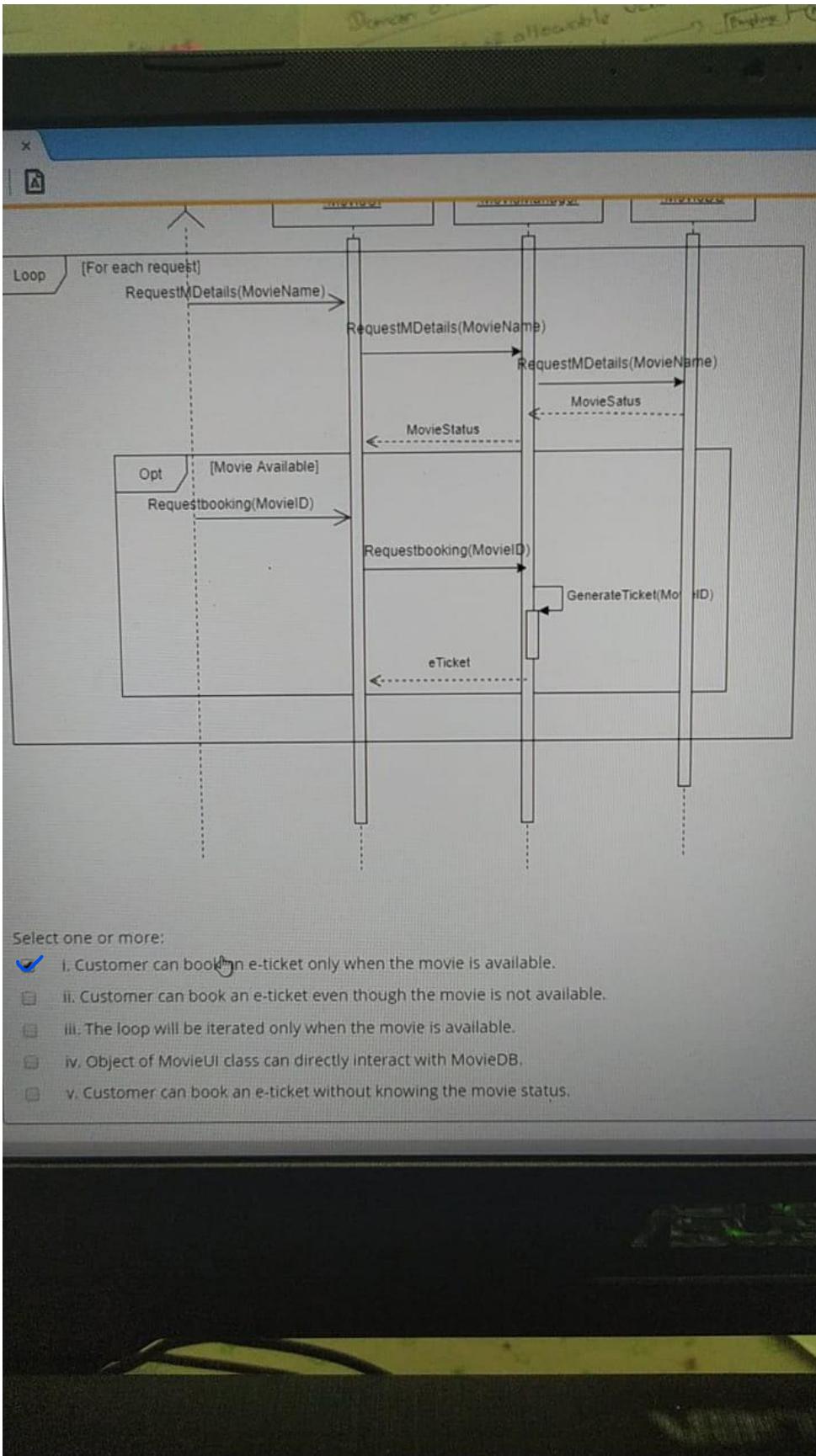
B



C

Select one or more:

- i. Object with stereotype A can directly interact with an object with the stereotype C.
- ii. Object with stereotype B can directly interact with an object with the stereotype C.
- iii. Object with stereotype A can directly interact with another object with the same stereotype.
- iv. Object with stereotype A can directly interact with an object with the stereotype B.
- v. Object with stereotype B can directly interact with another object with the same stereotype.



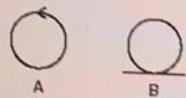
ode

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2
answered
out of
question

Select the statements which is/are true about the stereotypes A,B and C



Select one or more:

- i. Object with stereotype B can directly interact with another object with the same stereotype.
- ii. Object with stereotype A can directly interact with another object with the same stereotype.
- iii. Object with stereotype A can directly interact with an object with the stereotype B.
- iv. Object with stereotype A can directly interact with an object with the stereotype C.
- v. Object with stereotype B can directly interact with an object with the stereotype C.

Generalized CDEF
- having repeating parts

No new connection
rule copied. Subsequent rules

domain - set ok
composite → can be divided
can not be divided
a one value

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What statement/s is/are **correct** regarding given communication diagram?

```
sequenceDiagram
    participant Actor
    participant LibraryUI
    participant LibraryCtrl
    participant Book
    Actor->>LibraryUI: 1.0 : Borrow(Book_ID)
    activate LibraryUI
    LibraryUI->>LibraryCtrl: 1.1 : Borrow (Book_ID)
    activate LibraryCtrl
    LibraryCtrl->>Book: 1.2 [available] : ToBorrow()
    activate Book
    Book->>LibraryCtrl: 1.2.1 [available] : BorrowStatus()
    deactivate Book
    LibraryCtrl-->>Actor: 1.2.2 [available] : BorrowInfo()
```

*
Hand-drawn blue smiley face

Select one or more:

- i. There are no loop fragments in corresponding sequence diagram.
- ii. Message 1.2.2 is repeating.
- iii. ToBorrow() message can execute even if the book is not available.
- iv. BorrowStatus() message is send only if the book is available.
- v. There is a Opt fragment in corresponding sequence diagram.

ASUS

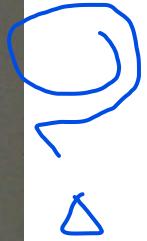
K F1 F2 F3 F4 F5 F6 F7 F8

3 \$ 4 % 5 ^ 6 & 7 * 8 (9) 0

What is/are the **correct** statement/s about a communication diagram?

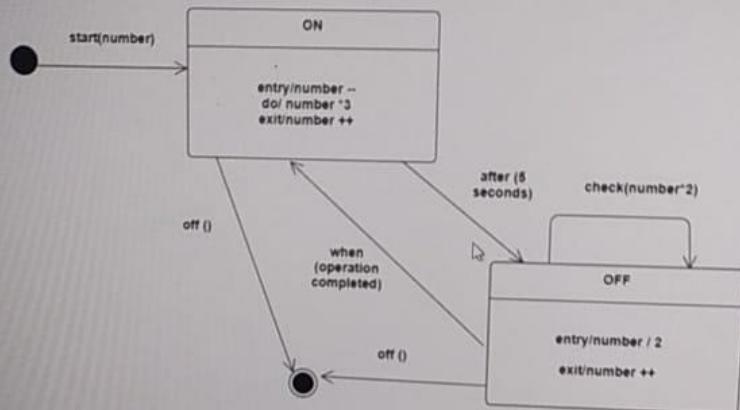
Select one or more:

- i. In a communication diagram "asterisk" (*) is used to indicate a loop.
- ii. Information represents by a communication diagram and sequence diagram is different.
- iii. In a communication diagram showing message direction is a not a must.
- iv. Sequence diagram and communication diagram represent the same information.
- v. In a communication diagram assigning a message number to each message is a must.



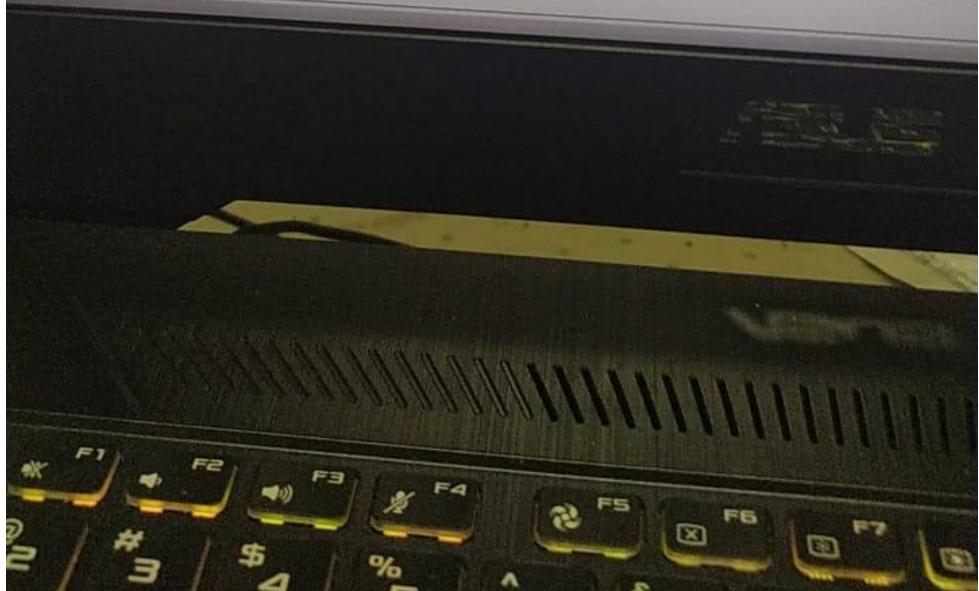
You are given the following state machine diagram. What is the value of number variable after the occurrence order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()



Select one:

- i. number is 8
- ii. number is 16
- iii. number is 25
- iv. number is 24
- v. number is 12



Quiz navigation

Finish attempt

Time left 0:46

INSTRUCTIONS

MULTIPLE CHOICE QUESTIONS

1 2
9 10 17 18
25 26

COMMENTS

31

Diagram A

```

schoolID = "S1"
schoolName = "Santita Balika"
type = "AB"
no_of_students = 1200
no_of_teachers = 100
location = "Kandy"
startDate = "1980-03-01"

```

Diagram B

```

schoolID = "S2"
schoolName = "Dudu Balika"
type = "AB"
no_of_students = 8000
no_of_teachers = 1000
location = "Colombo"
startDate = "1980-08-01"

```

Diagram C

```

S2 School
schoolID = "S2"
schoolName = "Dhemasudha"
type = "A"
no_of_students = 8000
no_of_teachers = 1000
location = "Colombo"
startDate = "1980-03-01"

```

Diagram D

```

SL
schoolID = "SL"
schoolName = "Somara Balika"
type = "C"
no_of_students = 5700
no_of_teachers = 500
location = "Colombo"
startDate = "1980-03-01"

```

Diagram E

```

S2 School
schoolID = "S2"
schoolName = "Anoka College"
type = "AB"
no_of_students = 9500
no_of_teachers = 900
location = "Kandy"
startDate = "1970-03-01"

```

Select one or more:

- i. Diagram A and Diagram B
- ii. Diagram C only
- iii. Diagram A and Diagram C
- iv. Diagram A, Diagram C, Diagram D, Diagram E
- v. Diagram A

ed

on

Quiz navigation

Finish attempt ...

Time left 0:47:08

INSTRUCTIONS

MULTIPLE CHOICE QUESTIONS

1 2 3 4
9 10 11 12 13
17 18 19 20 21
25 26 27 28 29

COMMENTS AND CONCERN

31

Which of the following statement/s is/are **true** about the given diagram?

Select one or more:

- i. The traces of messages can be a, c, b
- ii. The traces of messages can be a, b, c
- iii. The traces of messages can be c, b, a
- iv. The traces of messages can be a, a, b, c
- v. The traces of messages can be a, c, b, c

Moodle

Question 4
Not yet answered
Marked out of 1.00
Flag question

You are given the following state machine diagram. Assume that the active state is A. What is the value of y variable after the occurrence of the event chain e2, e2?

```

graph LR
    Start(( )) --> A[A]
    A -- "e2[y<4]y++" --> B[B]
    B -- "e2[y>5]" --> C[C]
    A -- "e2[y>=4]" --> A
    C -- "entry/y=y+3" --> C
    
```

Select one:

- i. y is 4
- ii. y is 3
- iii. y is 0
- iv. y is 2
- v. y is 5

Quiz navigation

Finish attempt ...
Time left 0:47:24
INSTRUCTIONS
MULTIPLE CHOICE
1 2 3
8 9 10
15 16 17
22 23 24
29 30
COMMENTS AND DRAFT
31

Read the description given below and identify the **correct** partial object diagram/s according to the given class diagram.

Amanda is a non-scholarship student of MCC Collage in Galle with student ID SC-66 and joined for the school in 5th of December 2000. She joined the school in the same date that she got funds for studies. She got ten thousand rupees for the fund from the Help non-profit organization. This organization help about twenty students with amount of two lacks. Amanda lives in Kegalle and born in 3rd of November 1995. MCC collage is type AB and started in 1890-9-2 with school ID AB235. Achini with student ID SC-56 is from Kandy and born in 5th of December 1995. "HelpPoor" is scholarship awarded organization that helped for her studies. She is a student from same school. She was given the scholarship in 5th of December 2000 with fifty thousand rupees. "HelpPoor" organization help 5 students in a given year with one lack of money.

```

classDiagram
    class School {
        schoolID: string
        schoolname: string
        type: string
        location: string
        startdate: date
        calculateexpences()
    }
    class Student {
        studentid: string
        studentname: string
        address: string
        dob: date
        calculatefee()
    }
    class organization {
        name: string
    }
    class non_profitOrganization {
        name: string
        amount: double
        no_of_students_awarded: int
    }
    class nonscholarship_Student {
        schoolfund_amount: double
        fund_year: date
    }
    class scholarship_Student {
        scholarship_amout: double
        awardedyear: date
    }

    School "1" *-- "1..* " Student : 
    School "1" *-- "1..* " organization : 
    School "1" *-- "1..* " non_profitOrganization : 
    Student "1" *-- "1..* " organization : 
    Student "1" *-- "1..* " non_profitOrganization : 
    organization "1" *-- "1..* " nonscholarship_Student : 
    organization "1" *-- "1..* " scholarship_Student :
    
```

Question 5

Not yet answered

Marked out of
1.00 Flag question

Read the description given below and identify the **correct** partial object diagram/s according to the given class diagram.

Achini is a scholarship student of MCC Collage in Galle with student ID SC-565 and joined for the school in 5th of December 2000. She joined the school in the same date that she got the scholarship award. She got fifty thousand rupees for the scholarship from the Help organization. This organization help about twenty students with amount of two lacks. Achini lives in Kegalle and born in 3rd of November 1995. MCC collage is type AB and started in 1890-9-2 with school ID AB235. Amanda with student ID SC-66 is from Kandy and born in 5th of December 1995. She is a student from same school but not a scholarship student. She was given school fund in 5th of December 2000 with ten thousand rupees.

1 0.†

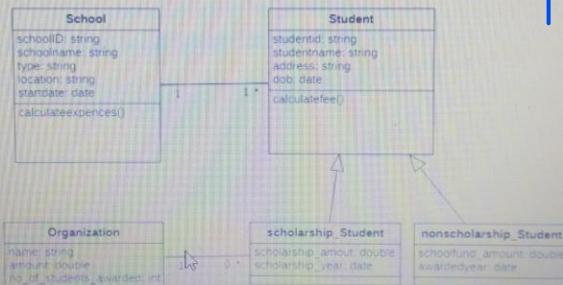


Diagram A

```
graph LR; S1["S1: School"]
```

Diagram B

```
graph LR; St1["St1: Student"]
```

Diagram C

```
graph LR; S2["S2: School"] --- St2["St2: Student"]
```

Diagram D

```
graph LR; St3["St3: Student"] --- S3["S3: School"]; St3 --- S4["S4: School"]
```

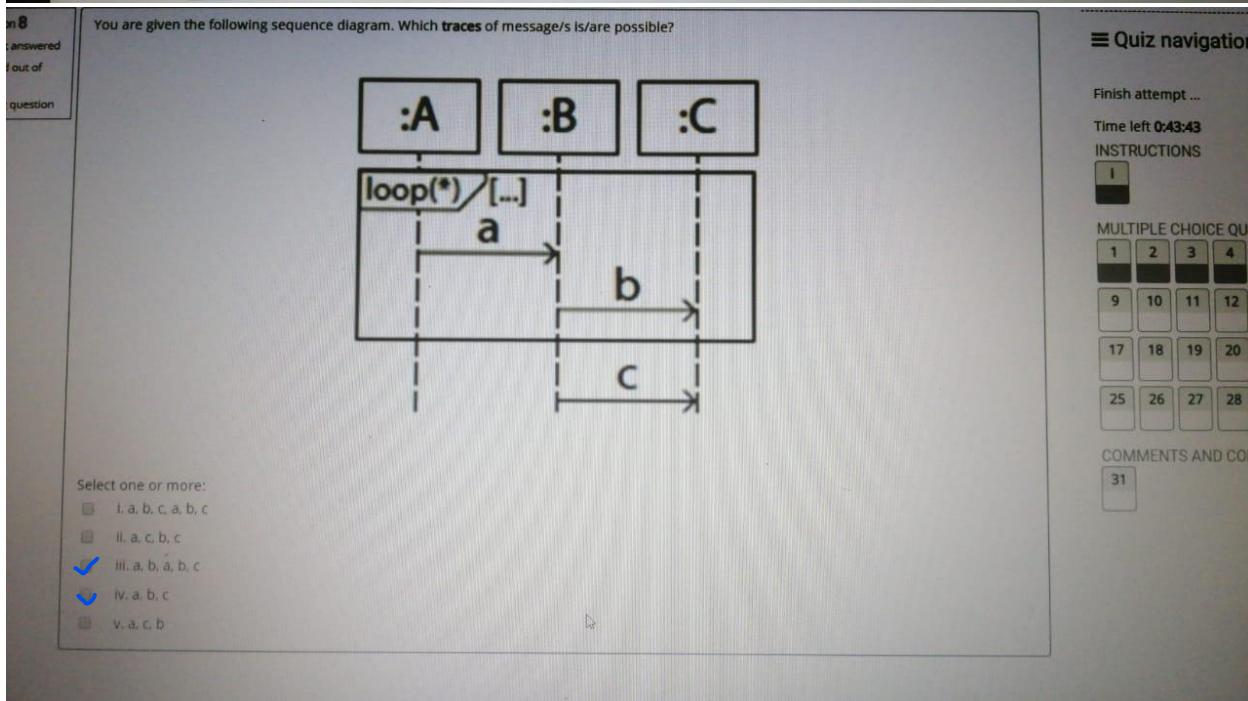
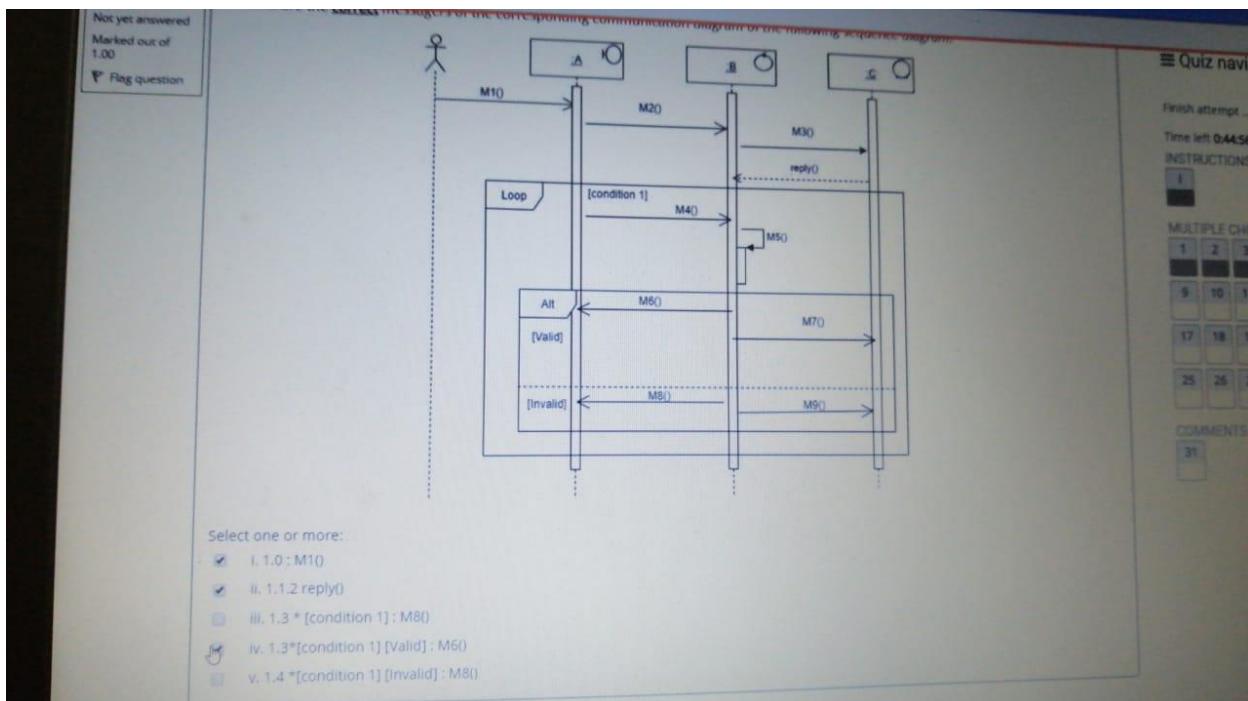
Diagram E

```
graph LR; S5["S5: School"] --- St4["St4: Student"]; S6["S6: School"] --- St4
```

Select one or more:

- i. Diagram A, B, C, D
- ii. Diagram C and E
- iii. Diagram C, D, E
- iv. Diagram E only
- v. Diagram C only

[Next page](#)



According to the following sequence diagram, which operation/s belongs to Class A?

The sequence diagram illustrates the following interactions:

- a1:A** sends **x(1)** to **b1:B**.
- b1:B** sends **y(123)** to **a2:A**.
- a2:A** sends **x(1)** to **b2:B**.
- b2:B** sends **x:"abc"** to **c1:C**.
- c1:C** sends **y(456)** to **b2:B**.
- b2:B** sends **z()** back to **a2:A**.

Select one or more:

- A. **xString**
- B. **yString**
- C. **y(123)**
- D. **M3RI**
- E. **Z0**



Question 6

Not yet answered

Marked out of
0[Flag question](#)

What statement/s is/are true about function-oriented and object-oriented programming?

Select one or more:

- i. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.
- ii. All of the mentioned are incorrect.
- iii. Function oriented design is the result of focusing attention to the function of the program.
- iv. Object-oriented design mainly concentrates on classes and its instances.
- v. Object oriented design focusing on the data that are to be manipulated by the program.

[Next page](#)

Question 5

Not yet answered

Marked out of
1.00[Flag question](#)

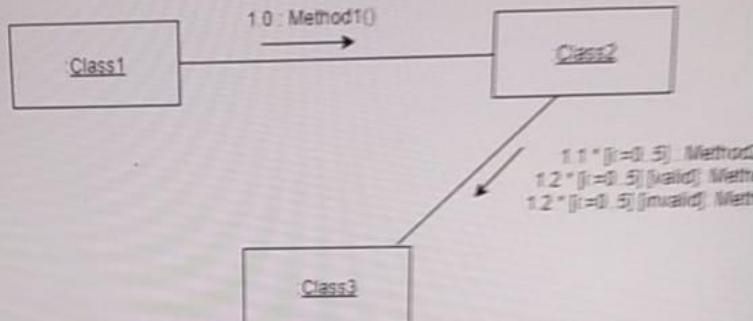
What statement/s is/are true about function-oriented and object-oriented programming?

Select one or more:

- i. Object-oriented design mainly concentrates on classes and its instances.
- ii. Function oriented design is the result of focusing attention to the function of the program.
- iii. All of the mentioned are incorrect.
- iv. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.
- v. Object oriented design focusing on the data that are to be manipulated by the program.

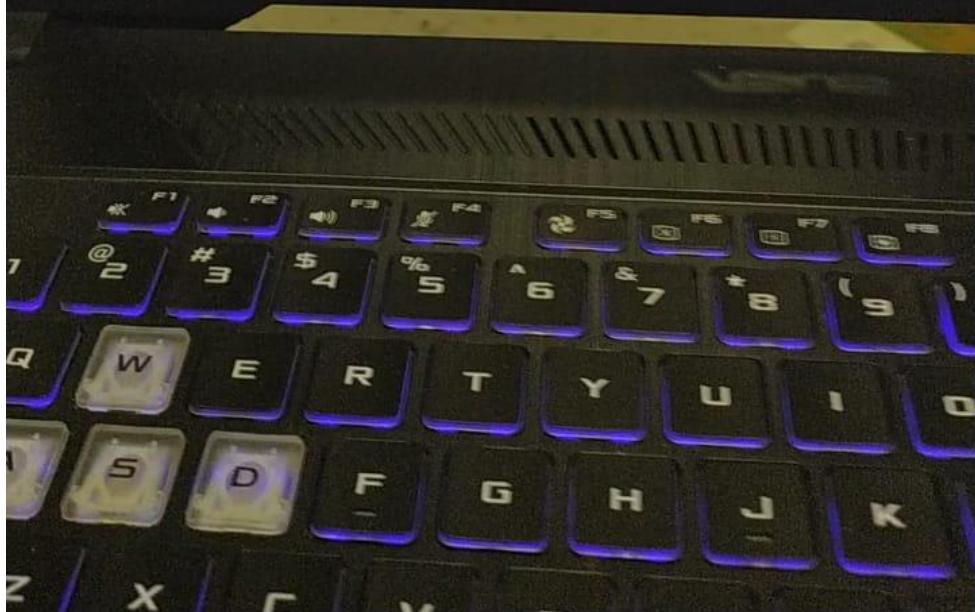
[Next page](#)1
2
29
31COM
31

What statement/s is/are **correct** regarding given communication diagram?



Select one or more:

- i. This loop can run for 6 times.
- ii. There is an Alternative fragment in the corresponding sequence diagram.
- iii. This loop can run for 7 times.
- iv. All the mentioned statements are correct.
- v. There is an Optional fragment in the corresponding sequence diagram.



• start(6)
 • after(5 seconds)
 • when(operation completed)
 • off()

Select one:

- i. number is 16
- ii. number is 12
- iii. number is 25
- iv. number is 24
- v. number is 8

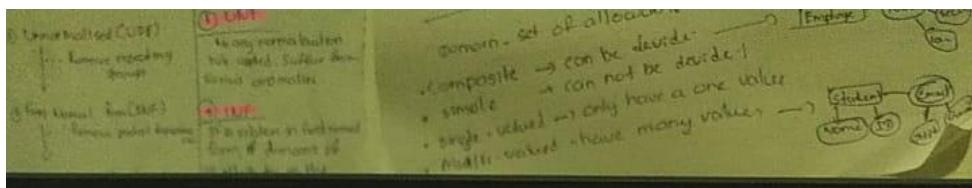
SIIT Sri Lanka Institute of Information Technology

Question 5
Not yet answered
Marked out of 1.00
 Flag question

What statement/s is/are **true** about function-oriented and object-oriented programming?

Select one or more:

- i. Object-oriented design mainly concentrates on classes and its instances.
- ii. Function oriented design is the result of focusing attention to the function of the program.
- iii. All of the mentioned are incorrect.
- iv. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.
- v. Object oriented design focusing on the data that are to be manipulated by the program.



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Which of the following/s is/are **not true** about Alt and Opt fragments?

Select one or more:

- i. Alt is used to describe alternative scenarios and only one of the options will be executed. Opt is used to describe an optional step which may or may not be used.
- ii. Opt is used to describe alternative scenarios and only one of the options will be executed. Alt is used to describe an optional step.
- iii. Alt is more used for several choices, like a switch, while with Opt it will only have one choice.
- iv. Opt and Alt are similar when Opt is used within a Par fragment.
- v. Opt is more used for several choices, like a switch, while with Alt it will only have one choice.

Next



Which statement/s is/are **not true** about Interaction Diagrams?

Select one or more:

- i. They are good at showing collaborations among objects.
- ii. They are good at exploring concurrency and multi-thread issues.
- iii. They are good when you want to look at the behaviour of several objects within a single use case.
- iv. They are not good at showing collaborations among objects.
- v. They are not good at exploring concurrency and multi-thread issues.

Next page

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What statement/s is/are **true** about function-oriented and object-oriented programming?

Select one or more:

- i. All of the mentioned are incorrect.
- ii. Object-oriented design mainly concentrates on classes and its instances.
- iii. Function oriented design is the result of focusing attention to the function of the program.
- iv. Object oriented design focusing on the data that are to be manipulated by the program.
- v. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.

Next page



Answered
of
question

What is/are incorrect about object diagrams?

Select one or more:

- i. Object diagram captures the behavior of a single use case.
- ii. Shows a complete or partial view of the structure of a modeled system at a specific time.
- iii. Object diagram shows the dynamic view.
- iv. Time oriented diagram.
- v. An object is an instance of a class.



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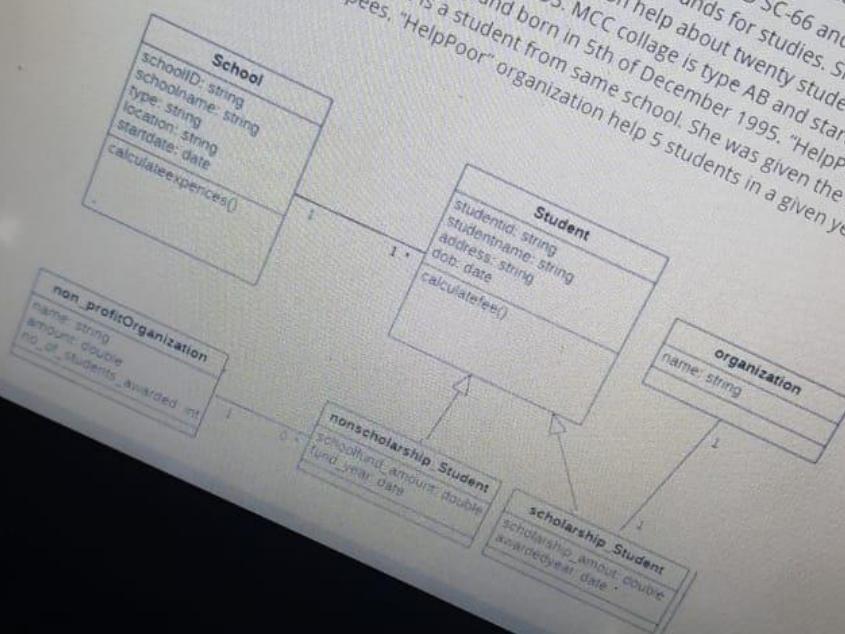
Question 6

4 out of

question

Read the description given below and identify the **correct** partial object diagram/s according to the description.

Amanda is a non-scholarship student of MCC Collage in Galle with student ID SC-66 and joined December 2000. She joined the school in the same date that she got funds for studies. She got the fund from the Help non-profit organization. This organization help about twenty students with AB235. Achini with student ID SC-56 is from Kandy and born in 3rd of November 1995. MCC collage is type A8 and started in 1st December 2000 with fifty thousand rupees. "HelpPoor" organization help 5 students in a given year with money.



Which of the following statements about the two given diagrams are true?

Diagram 1

A

entry/ y=0

m()/ y-

Diagram 2

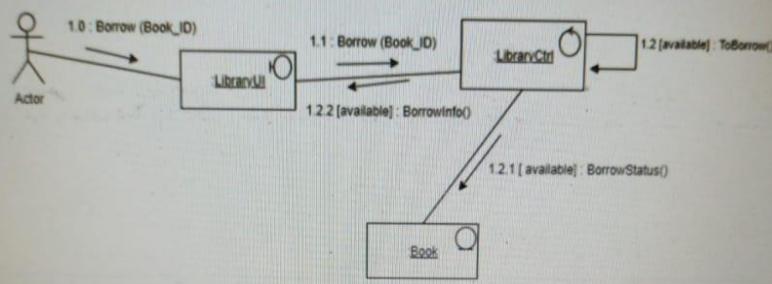
B

entry/ y=0
do/ y-

Select one or more:

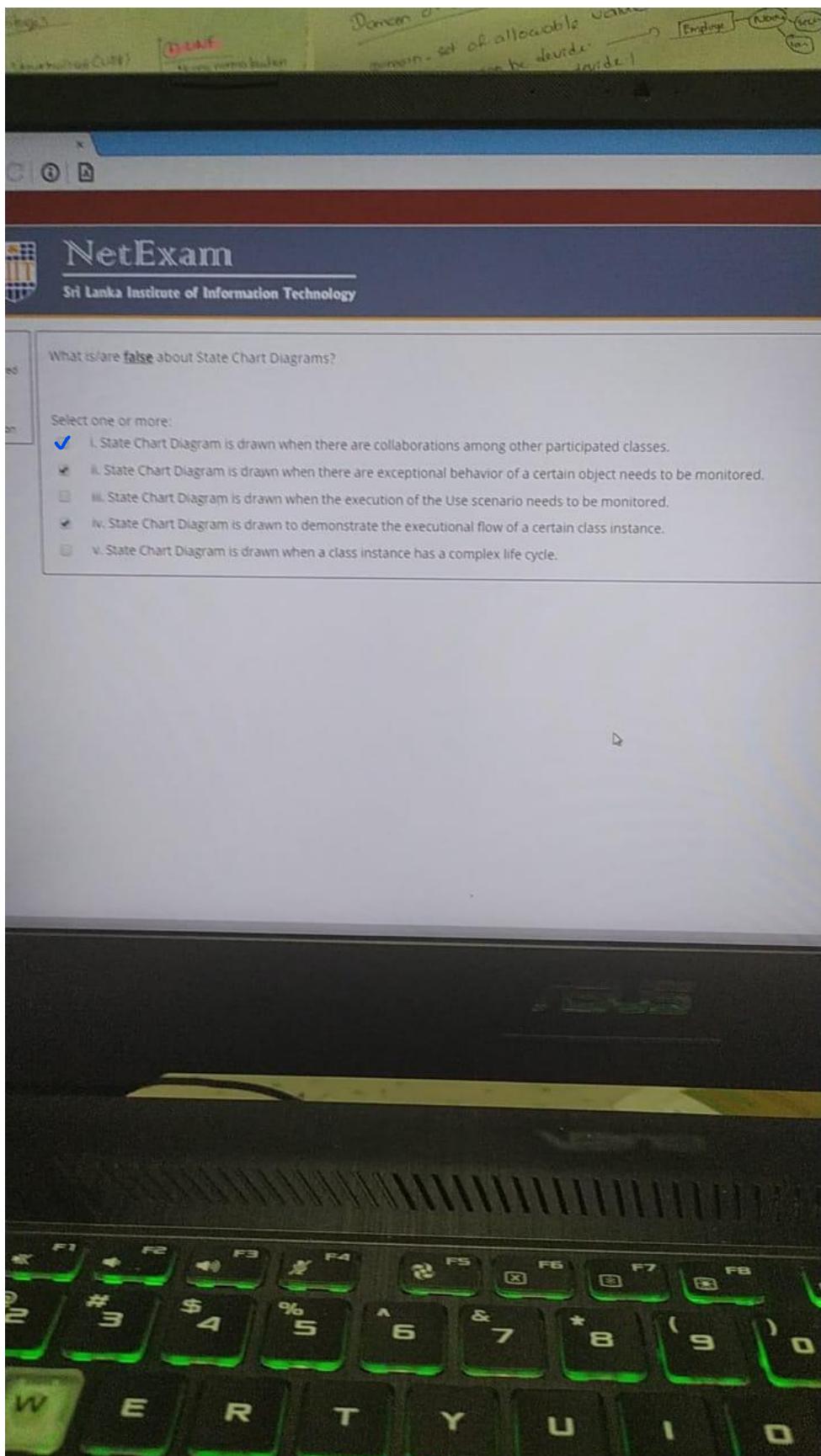
- i. Diagram 2 the entry-activity is executed repeatedly with do activity.
- ii. The two diagrams are not equivalent.
- iii. The two diagrams are equivalent.
- iv. In Diagram 1, the entry-activity is executed every time when "m()y-" occurs.
- v. Diagram 2 the entry-activity is only executed once.



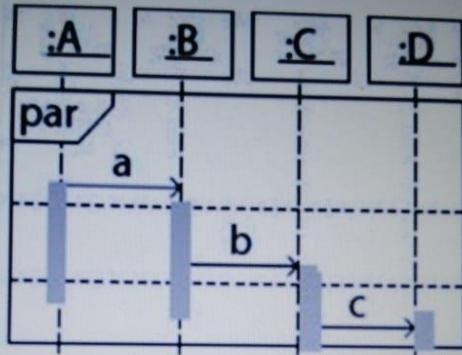


Select one or more:

- i. ToBorrow() message can execute even if the book is not available.
- ii. BorrowStatus() message is send only if the book is available.
- iii. There are no loop fragments in corresponding sequence diagram.
- iv. Message 1.2.2 is repeating.
- v. There is a Opt fragment in corresponding sequence diagram.



Flag question



Select one or more:

- i. The traces of messages can be c, b, a
- ii. The traces of messages can be a, c, b, c
- iii. The traces of messages can be a, c, b
- iv. The traces of messages can be a, a, b, c
- v. The traces of messages can be a, b, c

Finis
Time
INST
1
MU
1
9
11
20
CO
3

generates set
can be divided
in one vertex

equivalent methods
use capital letters
vertex connection

equivalent
can be divided
in one vertex

Diagram 1

A

entry/ y=0

m(y) y~

Diagram 2

B

entry/ y=0
do/ y~

Select one or more:

i. The two diagrams are not equivalent.

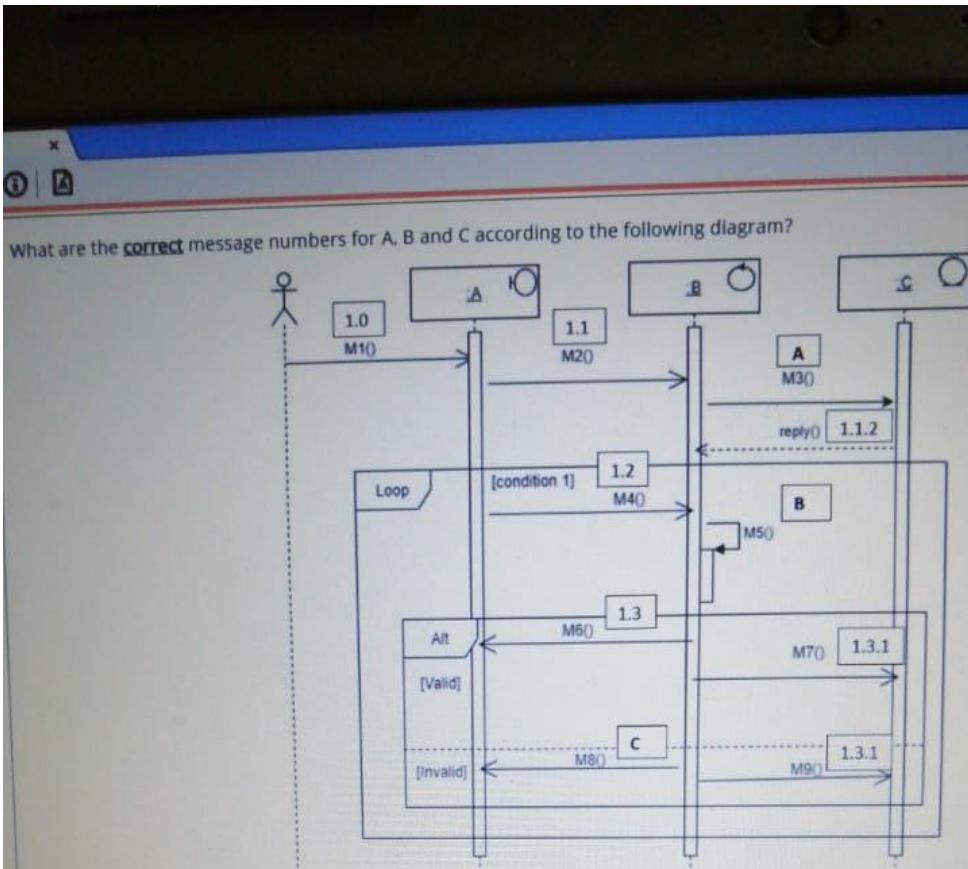
ii. Diagram 2 the entry-activity is executed repeatedly with do activity.

iii. In Diagram 1, the entry-activity is executed every time when "m(y) y~" occurs.

iv. Diagram 2 the entry-activity is only-executed once.

v. The two diagrams are equivalent.

Next page



Select one:

- I. A - 1.1.1, B - 1.2.1, C - 1.3
- II. A - 1.2.1, B - 1.2.1, C - 1.3
- III. A - 1.1.1, B - 1.2.2, C - 1.3
- IV. A - 1.1.1, B - 1.2.1, C - 1.4
- V. A - 1.2.1, B - 1.2.2, C - 1.4

DELL



Q

M *P* *X*

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The events in a sequence diagram are determined in an order. Select the best answer based on how the message order is defined in sequence diagram.

Select one:

- i. By placing numbers in comments along the left-hand margin of the diagram
- ii. By sequencing the numbers of the messages
- iii. By placing numbers in comments along the right-hand margin of the diagram
- iv. By following the order of the messages in the use case description
- v. By the relative position of the messages on the timeline

[Next page](#)

Q *R* *S* *T* *U* *V* *W* *X* *Y* *Z* *A* *B* *C* *D* *E* *F* *G* *H* *I* *J* *K* *L*

Moodle

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Question 16
Not yet answered
Marked out of 1.00
[Flag question](#)

Which of the following statement/s is/are **true** about the given diagram?

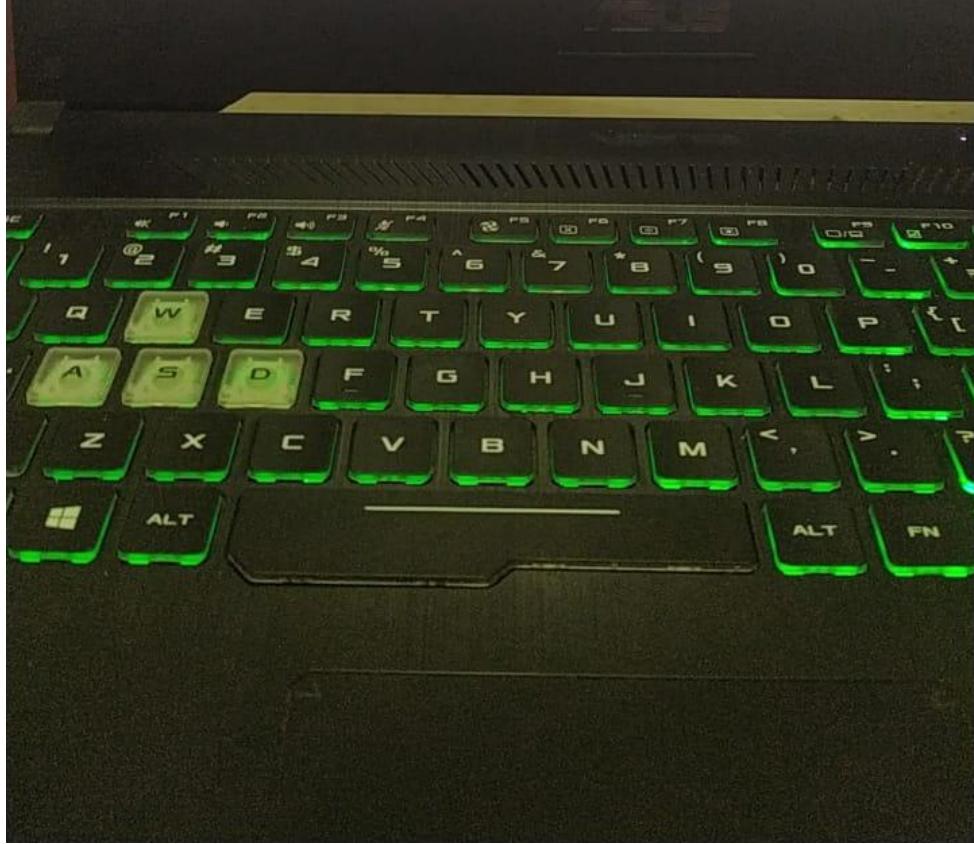
sd Add a new advert to a campaign

```
graph TD; CM[CampaignManager] -- "getIam" --> Client[Client]; CM -- "initCampaign" --> Loop1{loop [if or all client's campaigns]}; Loop1 -- "getCampaignDetail" --> Adver[Adver]; CM -- "listAdvert" --> Loop2{loop [if or all campaign's adverts]}; Loop2 -- "getAdvertDetail" --> newAdver[newAdver]; CM -- "addNewAdver" --> newAdver;
```

Select one or more:

- i. After getting the list of campaigns the loop will iterate for all the listed client campaign.
- ii. After getting the list of campaigns the loop will iterate only for the selected client campaign.
- iii. After getting the list of adverts the loop will iterate for all the listed adverts.
- iv. The diagram does not instantiate a new object.
- v. After getting the list of adverts the loop will iterate only for the selected adverts.

[Next page](#)



You are given the following state machine diagram. What is the **value of number variable** after the occurrence of the order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()

ON

```
graph LR; Start(( )) -- "start(number)" --> ON[ON]; ON -- "entry/number := do/number * 3; exit/number++;" --> Transition1(( )); Transition1 -- "off()" --> OFF[OFF]; Transition1 -- "when(operation completed)" --> Transition2(( )); Transition2 -- "off()" --> OFF; Transition1 -- "after(5 seconds)" --> Transition3(( )); Transition3 -- "check(number / 2)" --> OFF;
```

OFF

Select one:

- i. number is 24
- ii. number is 25
- iii. number is 8
- iv. number is 12
- v. number is 16

A state machine diagram is displayed on a computer screen. The diagram consists of two states: 'ON' and 'OFF'. The 'ON' state is the initial state, indicated by a solid black circle. The 'OFF' state is reached via a transition from the 'ON' state. The 'ON' state contains the following actions:

- entry/number := do/number * 3;
- exit/number++;

From the 'ON' state, there are three possible transitions:

- An 'off()' transition leads to a final state (double circle).
- A 'when(operation completed)' transition leads to another final state.
- An 'after(5 seconds)' transition leads to the 'OFF' state.

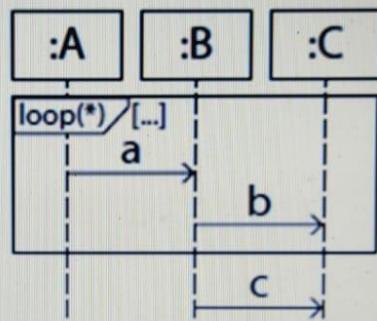
The 'OFF' state contains the following actions:

- entry/number / 2;
- exit/number++;

From the 'OFF' state, there is a transition labeled 'check(number / 2)' that loops back to the 'OFF' state. The question asks for the value of the 'number' variable after the occurrence of the specified order. The correct answer is 'ii. number is 25', as the initial value is 6, it becomes 18 after the first transition, and then it is halved to 9 after the 'check' transition.

Question 1
Not yet answered
Marked out of
1.00
 Flag question

You are given the following sequence diagram. Which **traces** of message/s is/are possible?



Select one or more:

- i. a, b, c, a, b, c
- ii. a, c, b
- iii. a, b, a, b, c
- iv. a, b, c
- v. a, c, b, c

ed

on

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Which of the following difference/s between class diagrams and object diagrams is/are true?

Select one or more:

- i. Object notation does not have a method compartment.
- ii. Class diagrams describe a system on type level, object diagrams on instance level.
- iii. Both class diagram and object diagram model for the whole system.
- iv. Class diagrams model the structure of a system; object diagrams model the dynamic view.
- v. Both diagram types are used for modeling the structural aspects of a system.



2

Answered
of
Question

What statement/s is/are true about function-oriented and object-oriented programming?

Select one or more:

- i. Function oriented design is the result of focusing attention to the function of the program.
- ii. Object oriented design focusing on the data that are to be manipulated by the program.
- iii. Object-oriented design mainly concentrates on classes and its instances.
- iv. All of the mentioned are incorrect.
- v. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.

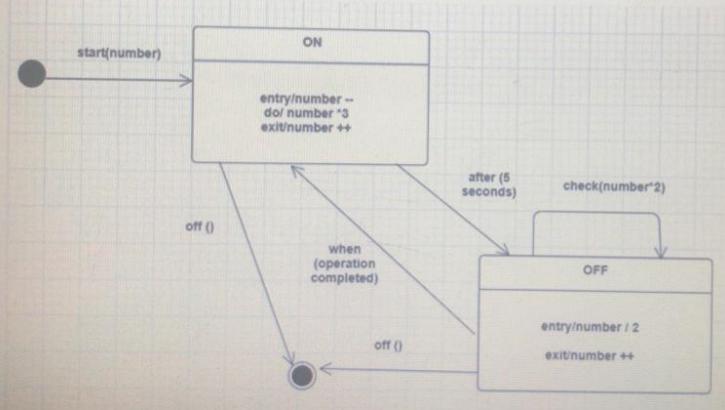
[Next page](#)**Question 12**

Not yet answered
Marked out of
1.00

Flag question

You are given the following state machine diagram. What is the value of number variable after the occurrence of the following event chain in order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()



Select one:

- i. number is 8

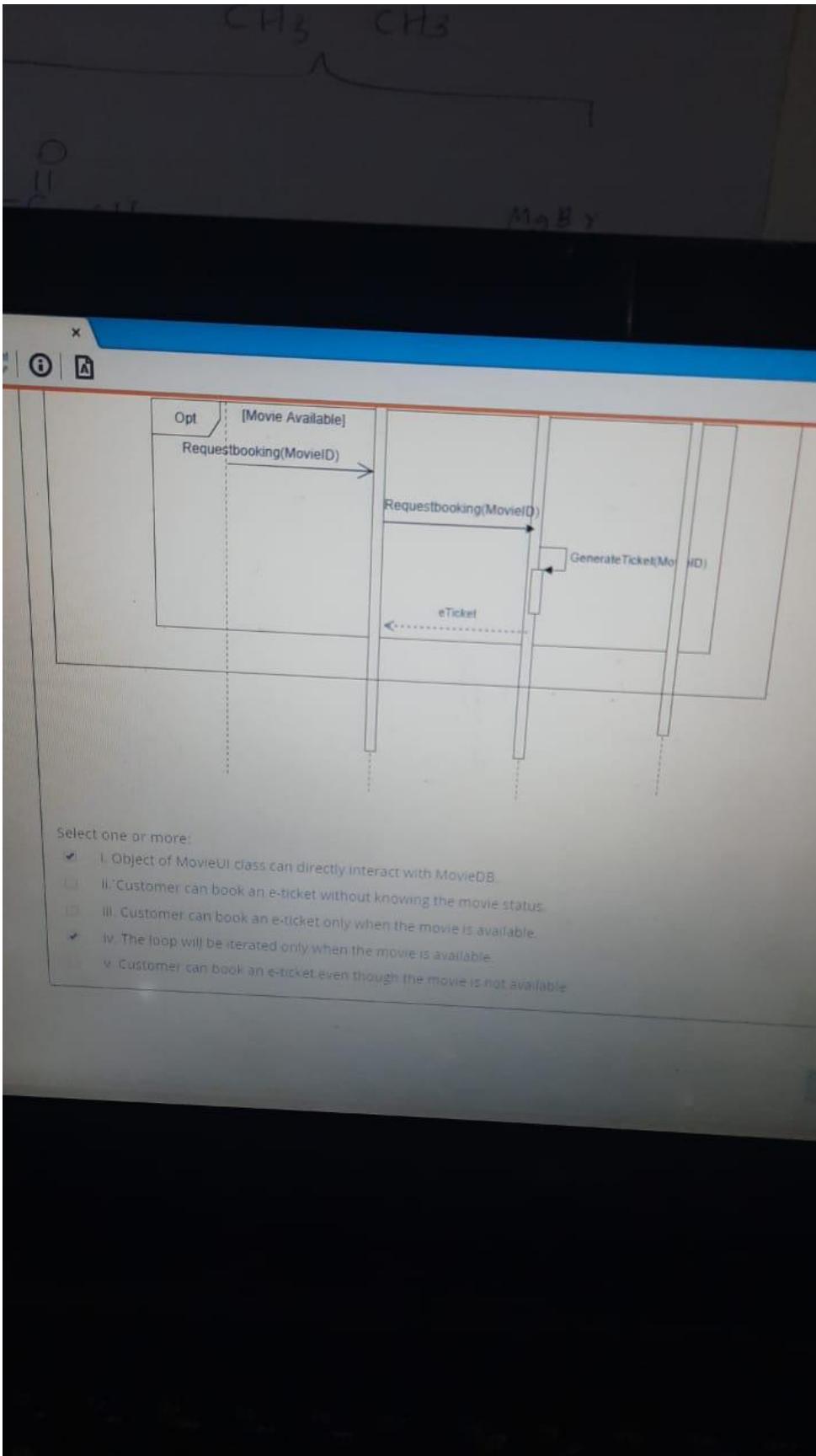
According to the following sequence diagram, which operation/s belongs to **Class A** ?

The sequence diagram illustrates the following interactions:

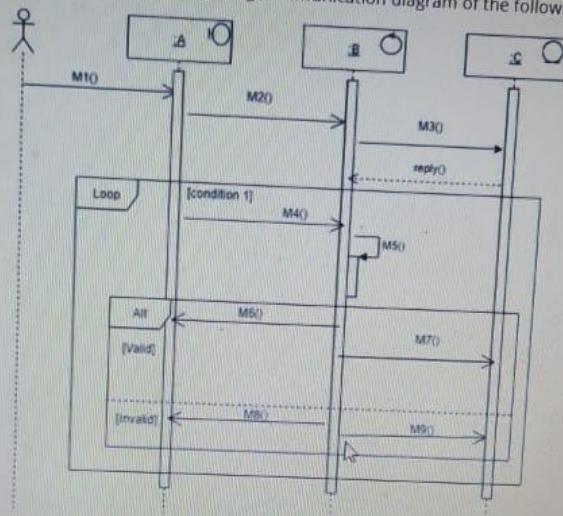
- a1:A** sends a synchronous message **x()** to **b1:B**.
- b1:B** sends a synchronous message **y(123)** to **a2:A**.
- a2:A** sends a synchronous message **x()** to **b2:B**.
- b2:B** sends a synchronous message **x:"abc"** to **c1:C**.
- c1:C** sends a synchronous message **z()** to **a1:A**.
- a1:A** sends a return message **y(456)** back to **b2:B**.

Select one or more:

- i. Z0
- ii. X()string
- iii. Y()string
- iv. X()int
- v. Y()int



What is/are the **correct** message/s of the corresponding communication diagram of the following sequence diagram?



Select one or more:

- i. 1.1.2 reply()
- ii. 1.3 * [condition 1] : M8()
- iii. 1.4 *[condition 1] [invalid] : M8()
- iv. 1.0 : M10
- v. 1.3*[condition 1] [valid] : M6()



Which statement/s is/are **not true** about Interaction Diagrams?

Select one or more:

- i. They are good at exploring concurrency and multi-thread issues.
- ii. They are not good at exploring concurrency and multi-thread issues.
- iii. They are not good at showing collaborations among objects.
- iv. They are good when you want to look at the behaviour of several objects within a single use case.
- v. They are good at showing collaborations among objects.

Ne

What statement/s is/are **true** about function-oriented and object-oriented programming?

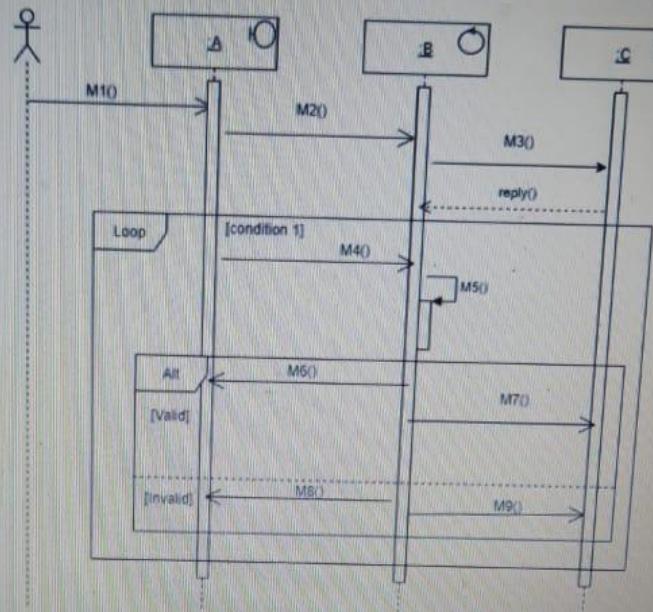
Select one or more:

- i. All of the mentioned are incorrect.
- ii. Object oriented design focusing on the data that are to be manipulated by the program.
- iii. Function oriented design is the result of focusing attention to the function of the program.
- iv. Function oriented design is focusing attention not only the function performed by the program, but instead on the data that are to be manipulated by the program.
- v. Object-oriented design mainly concentrates on classes and its instances.

Next page



What is/are the **correct** message/s of the corresponding communication diagram of the following



Select one or more:

- i. 1.1.2 reply()
- ii. 1.3 * [condition:1] : M8()
- iii. 1.4 *[condition 1] [invalid] : M8()
- iv. 1.0 : M1()
- v. 1.3*[condition 1] [Valid] : M6()

Question 18
Not yet answered
Marked out of 1.00
Flag question

What statement/s is/are correct regarding given communication diagram?

```

sequenceDiagram
    participant Actor
    participant LibraryUI
    participant LibraryCtl
    participant Book
    Actor->>LibraryUI: 1.0 : Borrow (Book_ID)
    activate LibraryUI
    LibraryUI->>LibraryCtl: 1.1 : Borrow (Book_ID)
    activate LibraryCtl
    LibraryCtl->>Book: 1.2 [available] : ToBorrow()
    activate Book
    Book->>LibraryCtl: 1.2.1 [available] : BorrowStatus()
    deactivate Book
    deactivate LibraryCtl
    LibraryCtl-->>Actor: 1.2.2 [available] : BorrowInfo()
  
```

Select one or more:

- i. There is a Opt fragment in corresponding sequence diagram.
- ii. There are no loop fragments in corresponding sequence diagram.
- iii. ToBorrow() message can execute even if the book is not available.
- iv. Message 1.2.2 is repeating.
- v. BorrowStatus() message is send only if the book is available.

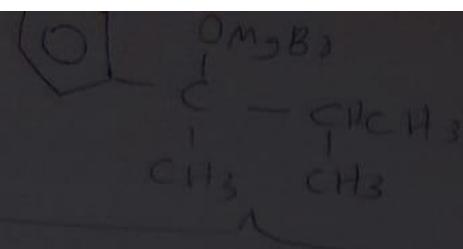


n 30
answered
1 out of
Flag question

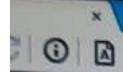
Which statement/s is/are not true about Interaction Diagrams?

Select one or more:

- i. They are not good at showing collaborations among objects.
- ii. They are good when you want to look at the behaviour of several objects within a single use case.
- iii. They are good at exploring concurrency and multi-thread issues.
- iv. They are good at showing collaborations among objects.
- v. They are not good at exploring concurrency and multi-thread issues.



MoBr₃



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What is/are **false** about State Chart Diagrams?

Select one or more:

- i. State Chart Diagram is drawn when there are collaborations among other participated classes.
- ii. State Chart Diagram is drawn to demonstrate the executional flow of a certain class instance.
- iii. State Chart Diagram is drawn when the execution of the Use scenario needs to be monitored.
- iv. State Chart Diagram is drawn when there are exceptional behavior of a certain object needs to be monitored.
- v. State Chart Diagram is drawn when a class instance has a complex life cycle.

Next p

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You are given the following state machine diagram. Assume that the active state is A. What is the **value of y variable after** the occurrence of the event chain e2, e2?

```
graph LR; Start(( )) --> A[A  
entry/y=3  
exit/y--]; A -- "e2[y<4]y++" --> B[B  
entry/y++]; B -- "e2[y>5]" --> C[C  
entry/y=y+3]; C -- "e2[y>=4]" --> A;
```

Select one:

- i. y is 3
- ii. y is 5
- iii. y is 2
- iv. y is 0
- v. y is 4

X

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What is/are **false** about State Chart Diagrams?

Select one or more:

- i. State Chart Diagram is drawn when there are collaborations among other participated classes.
- ii. State Chart Diagram is drawn when a class instance has a complex life cycle.
- iii. State Chart Diagram is drawn when the execution of the Use scenario needs to be monitored.
- iv. State Chart Diagram is drawn when there are exceptional behavior of a certain object needs to be monitored.
- v. State Chart Diagram is drawn to demonstrate the executional flow of a certain class instance.



The image shows a computer monitor displaying a NetExam interface. At the top, there is a hand-drawn chemical structure of 2-methylpropane (isobutane) with labels: CH₃, C, CH₃, and CH₃CH₃. Below the structure, the word "Methyl" is written. The main content of the screen is a question from NetExam:

Which of the following/s is/are not true about Alt and Opt fragments?

Select one or more:

- i. Opt and Alt are similar when Opt is used within a Par fragment.
- ii. Alt is used to describe alternative scenarios and only one of the options will be executed. Opt is used to describe an optional step which may or may not be used.
- iii. Opt is used to describe alternative scenarios and only one of the options will be executed. Alt is used to describe an optional step.
- iv. Opt is more used for several choices, like a switch, while with Alt it will only have one choice.
- v. Alt is more used for several choices, like a switch, while with Opt it will only have one choice.

A blue "Next page" button is visible at the bottom right of the screen area.

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You are given the following sequence diagram. Which **traces** of message/s is/are possible?

```
sequenceDiagram
    actor A
    actor B
    actor C
    loop[*] [*...*]
    A->>B: a
    B->>C: b
    C->>A: c
```

Select one or more:

- i. a, c, b, c
- ii. a, c, b
- iii. a, b, a, b, c
- iv. a, b, c, a, b, c
- v. a, b, c

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Identify the **correct** object/s according to the given class.

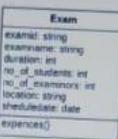


Diagram B

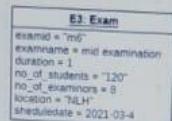


Diagram D

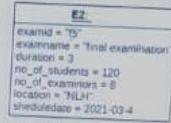


Diagram E

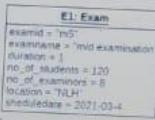
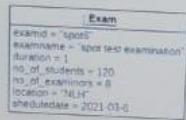
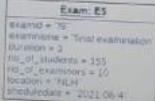


Diagram G



Select one:

- I. Diagram A and Diagram E
- II. Diagram C and Diagram D
- III. Diagram A, Diagram B, Diagram C, Diagram-D

CC(C)C

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Followings are the parts of the object diagram for the given class diagram. Identify the **correct** part/s of the corresponding object diagram.

Class Diagram:

```
classDiagram School "1" -- "1..*" Student
```

School Class:

- schoolID: string
- schoolname: string
- type: string
- no_of_students: int
- no_of_teachers: int
- location: string
- startdate: date
- calculate_expences()

Student Class:

- studentid: string
- studentname: string
- address: string
- year: int
- dob: date
- calculatefee()

Object Diagrams:

- Diagram A:** Shows a single object labeled S1: School.
- Diagram B:** Shows a single object labeled S1: Student.
- Diagram C:** Shows two objects, S3: Student and S4: School, connected by a line.
- Diagram D:** Shows three objects: S3: Student, S4: School, and S1: School, connected by lines.
- Diagram E:** Shows four objects: S3: Student, S4: School, S1: School, and S2: Student, connected by lines.

Exam

```
examid: string
examiname: string
duration: int
no_of_students: int
no_of_examinors: int
location: string
sheduledate: date
expenses()
```

Diagram A

Diagram B

E3: Exam

```
examid = "m6"
examiname = mid examination
duration = 1
no_of_students = "120"
no_of_examinors = 8
location = "NLH"
sheduledate = 2021-03-4
```

Diagram C

E2:

```
examid = "f5"
examiname = "final examination"
duration = 3
no_of_students = 120
no_of_examinors = 8
location = "NLH"
sheduledate = 2021-03-4
```

Diagram D

Exam

```
examid = "spot6"
examiname = "spot test examination"
duration = 1
no_of_students = 120
no_of_examinors = 8
location = "NLH"
sheduledate = 2021-03-6
```

Diagram E

E1: Exam

```
examid = "m5"
examiname = "mid examination"
duration = 1
no_of_students = 120
no_of_examinors = 8
location = "NLH"
sheduledate = 2021-03-4
```

Exam: E5

```
examid = "f6"
examiname = "final examination"
duration = 3
no_of_students = 155
no_of_examinors = 10
location = "NLH"
sheduledate = 2021-06-4
```

Select one:

- i. Diagram A and Diagram E
- ii. Diagram C and Diagram D
- iii. Diagram A, Diagram B, Diagram C, Diagram D
- iv. Diagram B, Diagram C, Diagram D
- v. Diagram A and Diagram C

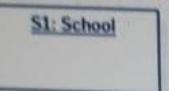


Diagram B

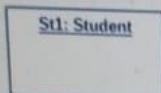


Diagram C

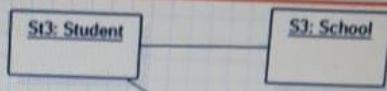
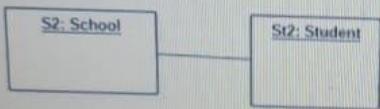
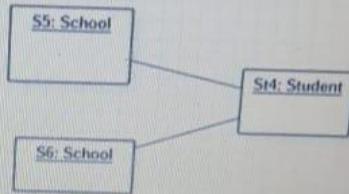


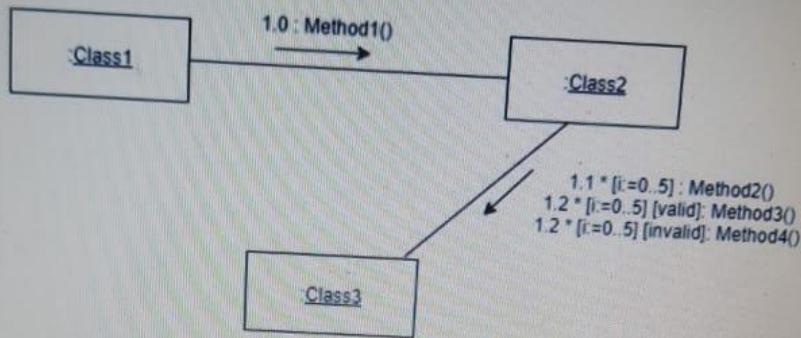
Diagram E



Select one or more:

- i. Diagram C and E
- ii. Diagram C, D, E
- iii. Diagram C only
- iv. Diagram E only
- v. Diagram A, B, C, D

What statement/s is/are **correct** regarding given communication diagram?



Select one or more:

- i. There is an Alternative fragment in the corresponding sequence diagram.
- ii. All the mentioned statements are correct.
- iii. This loop can run for 7 times.
- iv. There is an Optional fragment in the corresponding sequence diagram.
- v. This loop can run for 6 times.

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What statement/s is/are **correct** regarding given communication diagram?

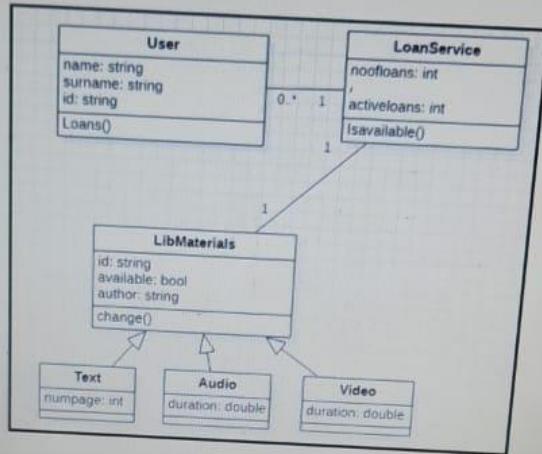
The communication diagram illustrates the interaction sequence:

- Actor** sends message 1.0 [Borrow(Book_ID)] to **LibraryU**.
- LibraryU** sends message 1.1 [Borrow(Book_ID)] to **LibraryO**.
- LibraryO** sends message 1.2 [available] : **ToBorrow()** back to **LibraryU**.
- LibraryO** sends message 1.2.2 [available] : **BorrowInfo()** to **Book**.
- Book** sends message 1.2.1 [available] : **BorrowStatus()** back to **LibraryO**.

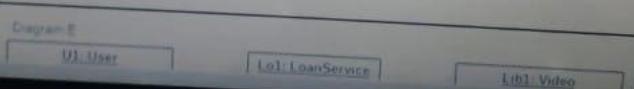
Select one or more:

- i. Message 1.2.2 is repeating.
- ii. There is a Opt fragment in corresponding sequence diagram.
- iii. **BorrowStatus()** message is send only if the book is available.
- iv. **ToBorrow()** message can execute even if the book is not available.
- v. There are no loop fragments in corresponding sequence diagram.

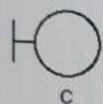
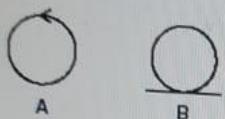
Followings are the parts of the object diagram for the given class diagram. Identify the correct part/s of the corresponding object diagram.



Select one or more:



Select the statements which is/are **true** about the stereotypes A,B and C



Select one or more:

- i. Object with stereotype B can directly interact with an object with the stereotype C.
- ii. Object with stereotype A can directly interact with an object with the stereotype C.
- iii. Object with stereotype A can directly interact with another object with the same stereotype.
- iv. Object with stereotype A can directly interact with an object with the stereotype B.
- v. Object with stereotype B can directly interact with another object with the same stereotype.

CC(C)(C)C[OMgBr]C1=CC=C1

MgBr

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What is/are **incorrect** about object diagrams?

Select one or more:

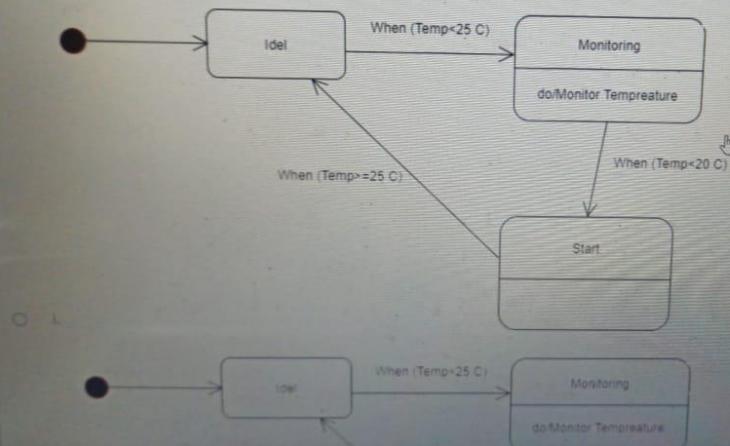
- i. Time oriented diagram.
- ii. An object is an instance of a class.
- iii. Shows a complete or partial view of the structure of a modeled system at a specific time.
- iv. Object diagram shows the dynamic view.
- v. Object diagram captures the behavior of a single use case.

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Read the following scenario, and select the **correct** state chart diagram.

A heater is set to automatically turn on itself to control the room temperature level when it reaches to a particular temperature level. Initially it is in the idle state and moves to monitoring state once the room temperature goes less than 25 Celsius. While in the monitoring state repeatedly it will check the room temperature and if the temperature goes further lower (below 20 Celsius) will start the heater. In this state also, it repeatedly monitors the temperature and when the room temperature goes back to normal (Temperature ≥ 25 Celsius) level it goes back to its idle state.

Select one:



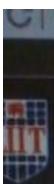
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Which of the following is including in a UML class diagram but not in UML object diagram?

Select one:

- i. List of attributes
- ii. None of the mentioned
- iii. Relationships (Links)
- iv. Both attributes and operations
- v. List of operations

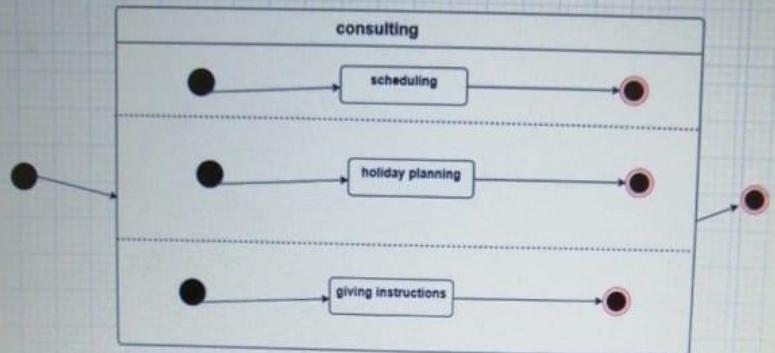




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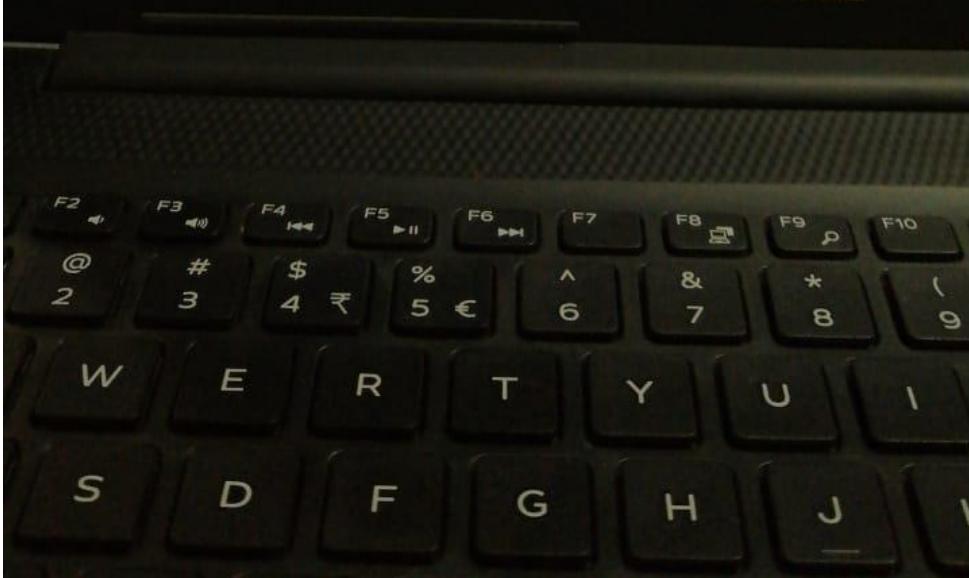
Select the correct statement/s about the given partial state chart diagram.



Select one or more:

- i. Consulting is a simple composite state with three parallel states.
- ii. Consulting is completed when it has scheduled, holiday planned and given the instructions.
- iii. Consulting is an orthogonal composite state with three parallel states.
- iv. State can contain sub states.
- v. Consulting is an orthogonal composite state with three sequential states.

DELL



Which of the following statement/s is/are true about the given diagram?

Select one or more:

- i. The traces of messages can be a, b, c
- ii. The traces of messages can be a, c, b, c
- iii. The traces of messages can be c, b, a
- iv. The traces of messages can be a, c, b
- v. The traces of messages can be a, a, b, c

The events in a sequence diagram are determined in an order. Select the best answer based on how the message order is defined in sequence diagram.

Select one:

- i. By placing numbers in comments along the right-hand margin of the diagram
- ii. By placing numbers in comments along the left-hand margin of the diagram
- iii. By the relative position of the messages on the timeline
- iv. By sequencing the numbers of the messages
- v. By following the order of the messages in the use case description

[Next page](#)

Question 7

Not yet answered
Marked out of
0.00

[Flag question](#)

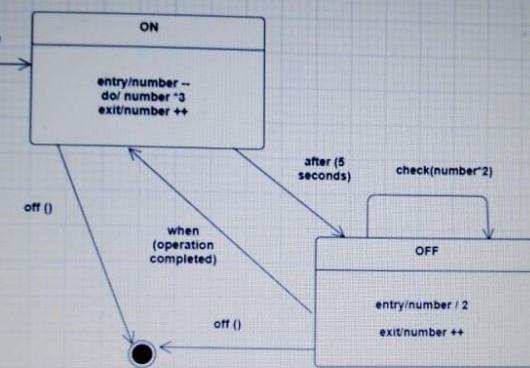
Which statement/s is/are **not true** about Interaction Diagrams?

Select one or more:

- i. They are not good at showing collaborations among objects.
- ii. They are good at showing collaborations among objects.
- iii. They are good at exploring concurrency and multi-thread issues.
- iv. They are good when you want to look at the behaviour of several objects within a single use case.
- v. They are not good at exploring concurrency and multi-thread issues.

[Next page](#)

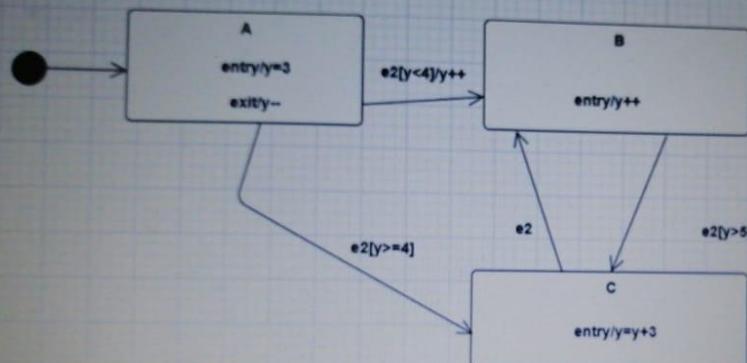
• off()



Select one:

- i. number is 24
- ii. number is 16
- iii. number is 12
- iv. number is 8
- v. number is 25

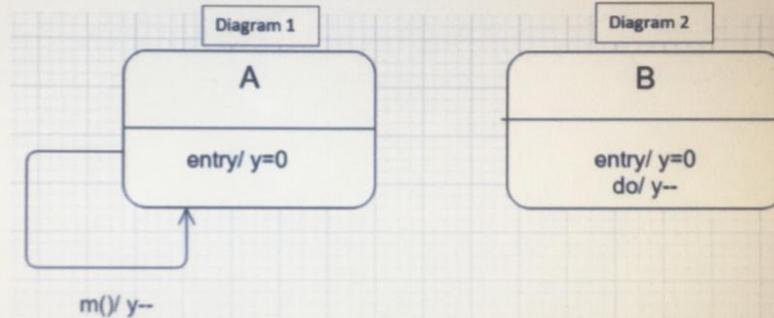
You are given the following state machine diagram. Assume that the active state is A. What is the value of y variable after the occurrence of the event chain e2, e2?



Select one:

- i. y is 3
- ii. y is 4
- iii. y is 5
- iv. y is 2
- v. y is 0

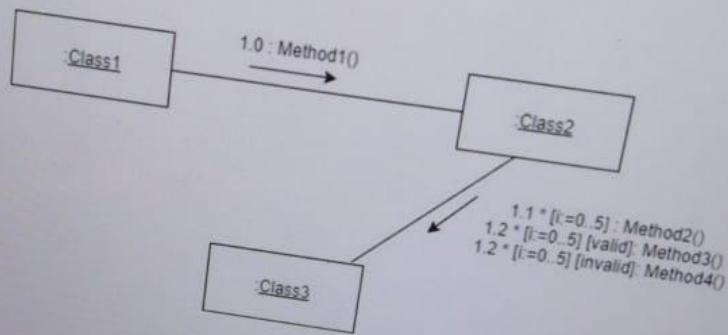
Which of the following statements about the two given diagrams are true?



Select one or more:

- i. Diagram 2 the entry-activity is executed repeatedly with do activity.
- ii. Diagram 2 the entry-activity is only executed once.
- iii. The two diagrams are equivalent.
- iv. In Diagram 1, the entry-activity is executed every time when "m()/y--" occurs.
- v. The two diagrams are not equivalent.

What statement/s is/are correct regarding given communication diagram?



Select one or more:

- i. All the mentioned statements are correct.
- ii. This loop can run for 7 times.
- iii. There is an Optional fragment in the corresponding sequence diagram.
- iv. There is an Alternative fragment in the corresponding sequence diagram.
- v. This loop can run for 6 times.

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NetExam
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5
Answered
out of
question

What is/are the **correct** statement/s about a communication diagram?

Select one or more:

- i. In a communication diagram showing message direction is a not a must.
- ii. Sequence diagram and communication diagram represent the same information.
- iii. In a communication diagram assigning a message number to each message is a must.
- iv. Information represented by a communication diagram and sequence diagram is different.
- v. In a communication diagram "asterisk" (*) is used to indicate a loop.

F1 F2 F3 F4 F5 F6 F7 @ # * F1 F2 F3 F4 F5 F6 F7

You are given the following state machine diagram. What is the **value of number variable** after the order?

- start(6)
- after(5 seconds)
- when(operation completed)
- off()

```
graph LR; Start(( )) -- "start(number)" --> ON[ON]; ON -- "entry/number--\n do/number*3\n exit/number++" --> Decision{ }; Decision -- "off()" --> End(( )); Decision -- "when\n(operation\ncompleted)" --> OFF[OFF]; OFF -- "entry/number/\n2\nexit/number++" --> End; Decision -- "after (5\nseconds)" --> Check{check(number/2)}; Check -- "off()" --> End; Decision -- "check(number/2)" --> OFF;
```

Select one:

- i. number is 25
- ii. number is 12
- iii. number is 24
- iv. number is 16
- v. number is 8