

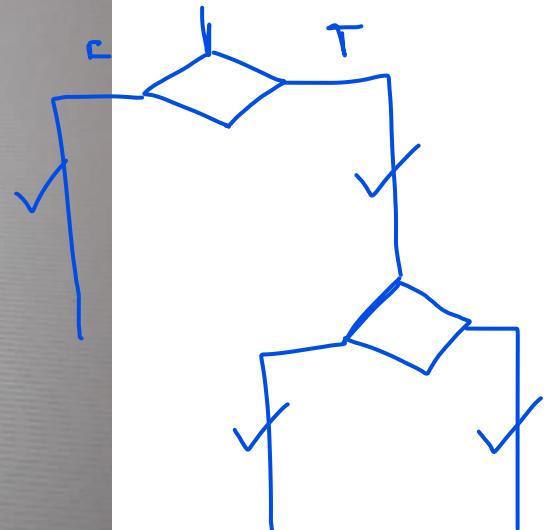
You have given the following code segment.

```
b = 5

while b > 0 :
    b -= 1
    if b == 5:
        break
    print(b)
print('Loop ended.')
```

Statement coverage percentage in the above code is % and branches can be identified in the code.

2 75.71 56 4 85.71

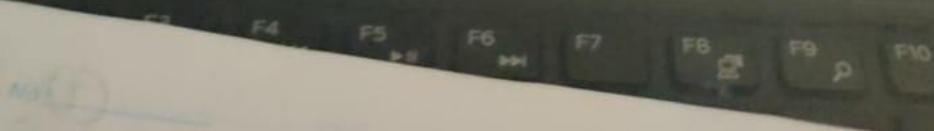


You have given the following code segment.

```
b = 1  
while b > 2:  
    b -= 1  
    if b == 2:  
        continue  
    print(b)  
print('Loop ended.')
```

Statement coverage percentage in the above code is % and branch coverage percentage is %.

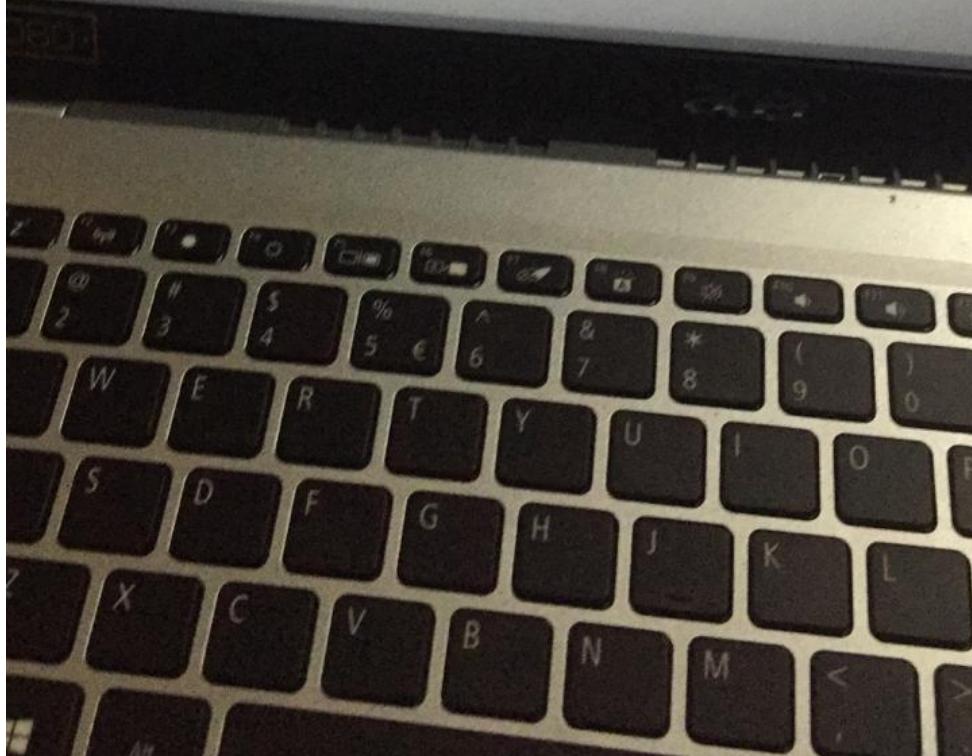
DELL



You have given the following code segment.

```
b = 5  
while b > 0 :  
    b -= 1  
    if b == 5:  
        break  
    print(b)  
print('Loop ended.')
```

Statement coverage percentage in the above code is % and branches can be identified in the code.

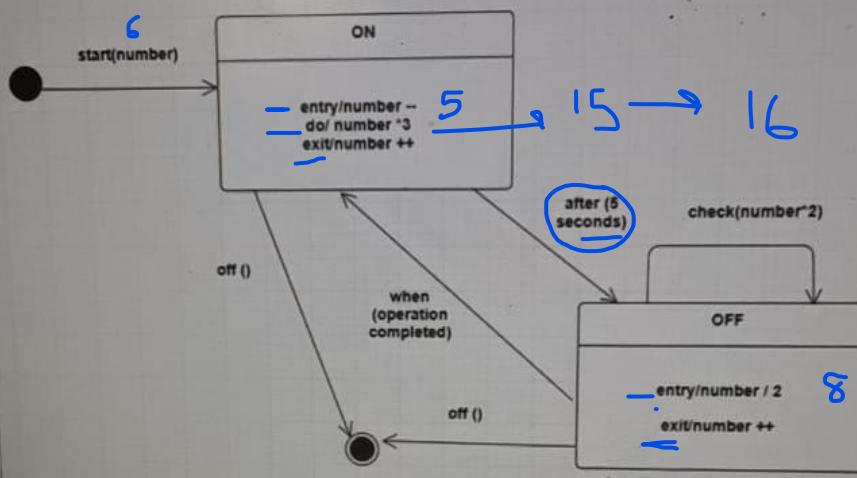




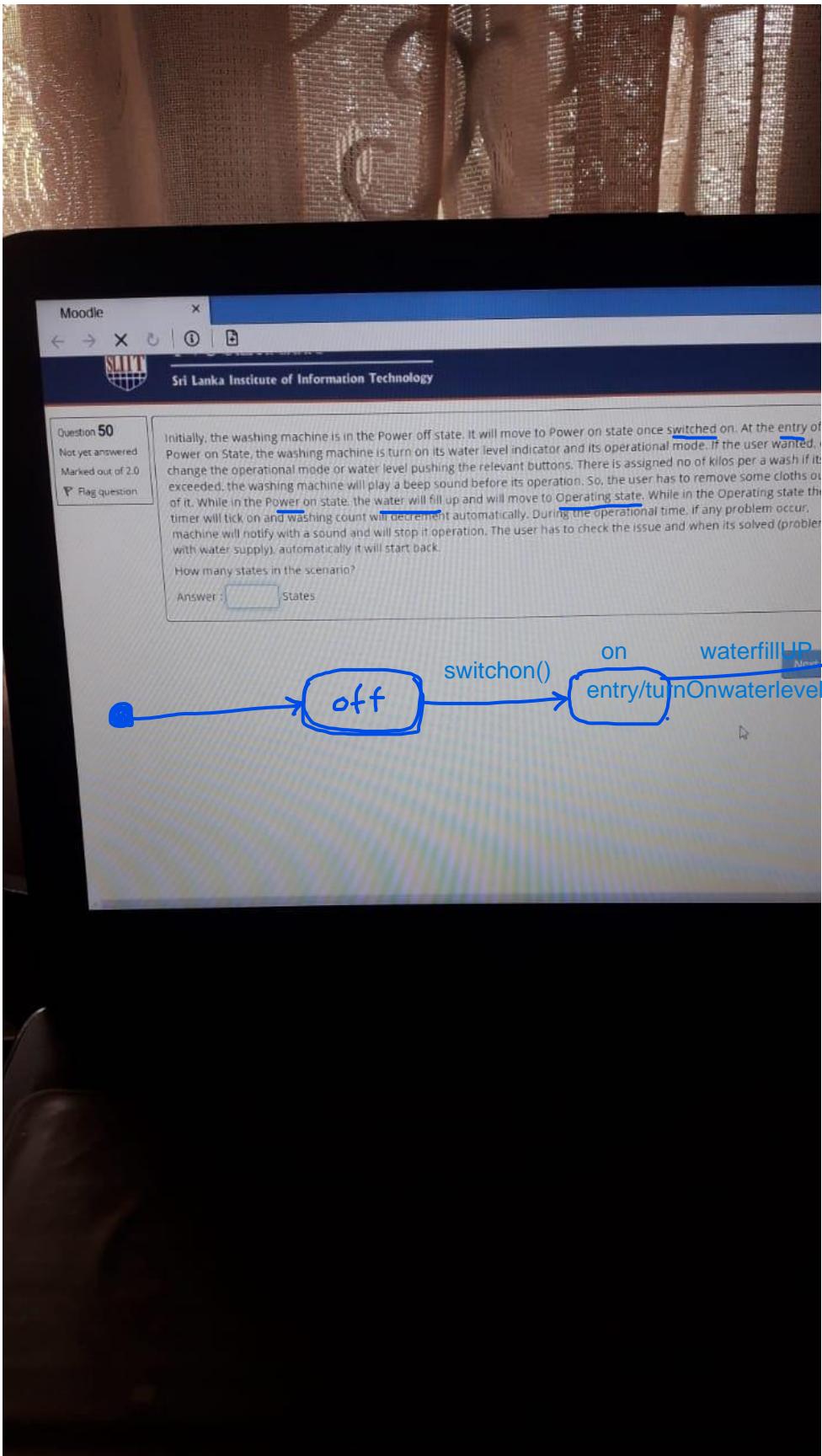
ered
of 2.0
stion

You are given the following state machine diagram. What is the value of the number variable at the end of the chain in order?

- start(6) ✓
- after(5 seconds) ✓
- off() ✓



value of the number variable is :





Question 39

Not yet answered

Marked out of 2.0

Flag question

Read the scenario and select the correct answer from drop down.

Online payment system facilitates their users to use credit/debit card to do ordering transactions easily. When someone enters the card details into the payment system, the system sends a message to the payment gateway to verify the given customer information. There the payment gateway will authenticate the given information and accept or deny the given information. If the information denied, the user can enter the details in another two attempts and all the attempts will be verified. If all attempts get failed, then the card state will be set to hold so, the customer will not be able to do any further transactions. Once the authentication is successful, then the required amount will be deducted and payment notification will be send to the customers' mobile number.

What is the best state representation can be used to illustrate the authentication process?

If you have assigned to model the state diagram, select the correct transition used to check the number of card attempts?

Module

NetExam

Sri Lanka Institute of Information Technology

Question 43

Not answered
0 out of 2.0
Avg question

Read the scenario and select the correct answer from drop down.

A Home automation system known as "Smart-Home" includes a Light controlling System that adjust the lighting level monitoring the intensity level. When it's the 6.00 a.m., automatically the controlling system will change to off and when it's 6.00 p.m. automatically it will set to on. There, the lighting level of the system initially set to low level. Gradually, when the nightfall it will change the lighting level to medium. If the user needs, he/she can use voice commands to change the light level if required. If user informs "High", the system needs to verify the input command and change its state accordingly. When the residents are leaving from home, the user can give command to off all the lights inside the house, where the system will only monitor the lights outdoor.

What the State transition can be used to represent the Voice command when leaving the house?

Choose...

Select the correct internal behavior of the controller, when the system automatically set to on?

Choose...

Next page



NETEXAM

Sri Lanka Institute of Information Technology

Question 2

Not yet answered

Marked out of 1.0

Flag question

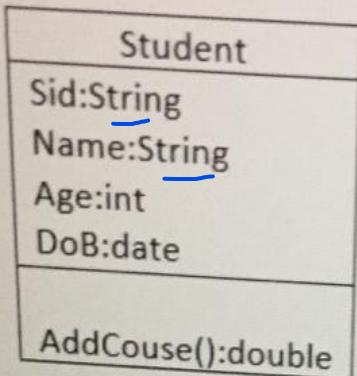
Which of the following statement/s is/are false?

Select one or more:

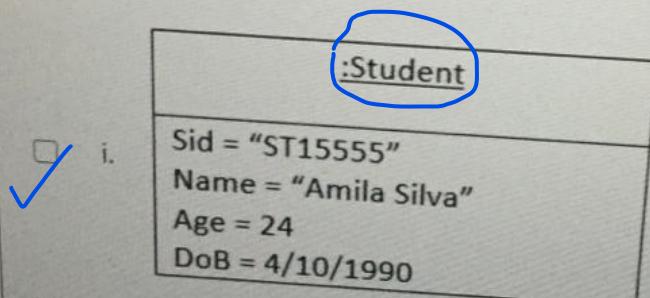
- i. Components are represented with a rectangle and a tabbed rectangle in the upper right corner.
- ii. A Component is a physical unit of implementation with well-defined interfaces that is intended to be used as a Irreplaceable part of a system.
- iii. An interface is a list of operations supported by a piece of software or hardware.
- iv. Interfaces can make components swappable.
- v. Component should be tightly coupled, so that they can be changed without changes on the other parts of the system.

Next page

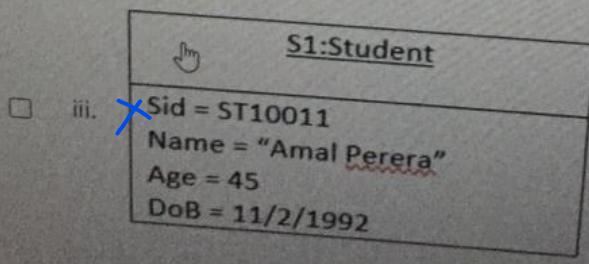
Select the correct object/s for the given class.



Select one or more:



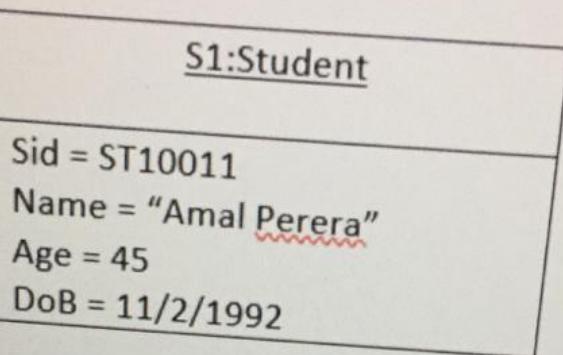
ii. None of the diagrams are correct



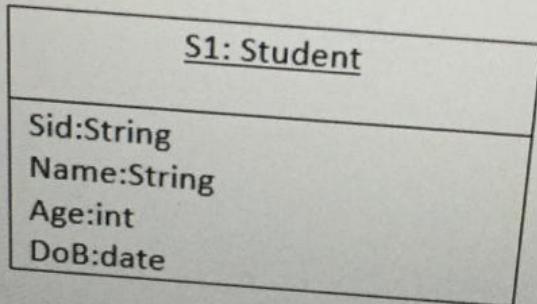
DoB = 4/10/1990

- ii. None of the diagrams are correct

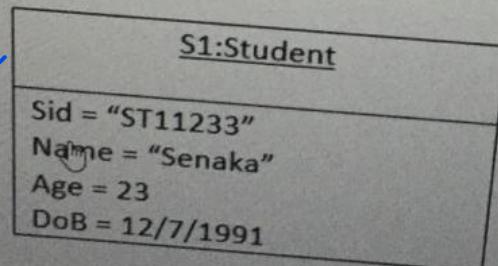
iii.



iv.



v.



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Question 2
yet answered
Marked out of 1.0
Flag 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 "asterisk" (*) is used to indicate a loop.
- iv. In a communication diagram assigning a message number to each message is a must.
- v. Information represented by a communication diagram and sequence diagram is different.

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Which of the following statement/s is/are false?

Select one or more:

- i. Components are represented with a rectangle and a tabbed rectangle in the upper irreplaceable part of a system. 
- ii. Interfaces can make components swappable.
- iii. A Component is a physical unit of implementation with well-defined interfaces that are tightly coupled, so that they can be changed without changes to the rest of the system.
- iv. Component should be tightly coupled, so that they can be changed without changes to the rest of the system.
- v. An interface is a list of operations supported by a piece of software or hardware.

DELL



What is/are **correct** about Guard expressions used in state chart dia

Select one or more:

- i. Guard expression can be only used in call and change triggers.
- ii. In a Guard expression , the condition must be true in order to se
- iii. The best way to represent Guard condition is as a boolean oper,
- iv. Guard expression can be used with all three types of triggers.
- v. Guard expressions cannot use in self transitions.

Moodle

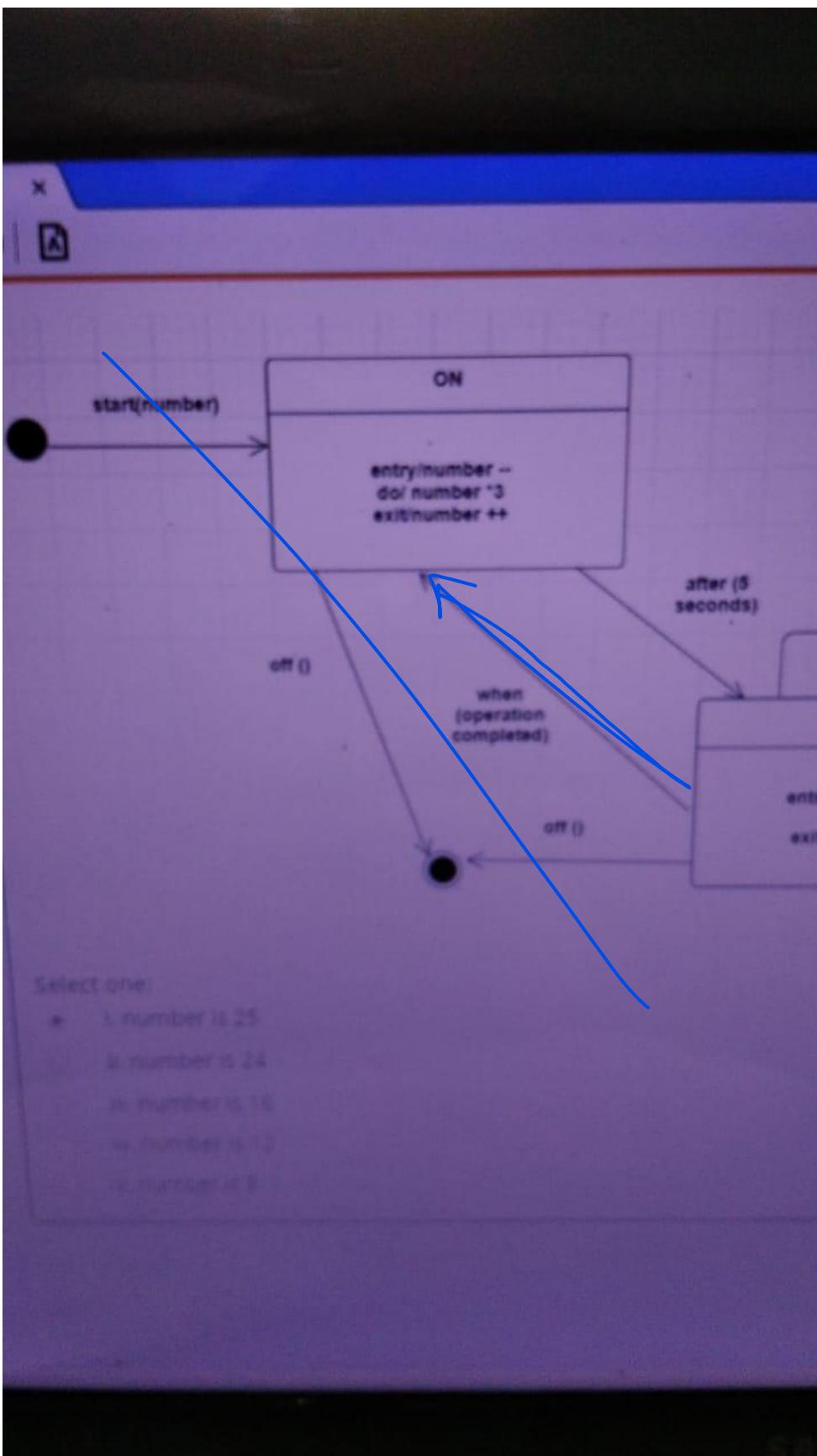
NetExam
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Question 3
Not yet answered
Marked out of 1.0
Flag question

Configuration Management consists of:

Select one or more:

- i. Release management and centralized version control
- ii. Change Management and distribution version control
- iii. None of the mentioned
- iv. Release Management and System building
- v. Version Management and Change Management



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An organization has several email templates that the employees can use different purposes. I offer emails, Milestone emails, new product announcement emails, Progress emails and Confidential emails. When sending any of these emails to outside source, the user can add a disclaimer and encrypt them. What is the design pattern that can be used, if you are asked to implement this email function?

Select one:

- i. Flyweight
- ii. Decorator
- iii. Facade
- iv. Singleton
- v. Observer

DELL



Information Technology

Are the correct statements about a communication diagram?

- Select one or more:
- i. In a communication diagram "asterisk" (*) is used to indicate a loop.
 - 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. In a communication diagram showing message direction is not a must.
 - v. Information represents by a communication diagram and sequence diagram.

Moodle

Marked out of 1.00

Flag question

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

Diagram:

```
graph LR; Start(( )) -- "start(number)" --> ON[ON]; ON -- "entry/number -- do/number *3  
exit/number++" --> ON; ON -- "5" --> 15[15]; 15 --> OFF[OFF]; OFF -- "entry/number / 2  
exit/number++" --> OFF; OFF -- "8" --> 9[9]; 9 -- "check(number=2)" --> OFF; OFF -- "after (5 seconds)" --> ON; OFF -- "off()" --> End(( )); ON -- "off()" --> End; ON -- "when (operation completed)" --> ON;
```

Handwritten annotations:

- Number 6 is written above the start block.
- Numbers 15 and 16 are written inside the ON block.
- Numbers 8 and 9 are written inside the OFF block.
- The value 24 is written next to the number 8.
- The value 25 is written next to the number 9.

Select one:

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

Which of the following test cases will ensure that statement "06" is executed

- 01 Input number of fruits in kilograms
- 02 Input number of vegetables kilograms
- 03 If fruits > 5kg and vegetables > 3kg then
- 04 Input Do you want to Dhal in less price (Yes / No)
- 05 If Dhal= "No"
- 06 Print "No discount calculation"
- 07 End if
- 08 End if.

Select one:

- i. vegetables = 2, fruits = 4, dhal= "yes".
- ii. vegetables = 1, fruits = 7, dhal= "no".
- iii. vegetables = 4, fruits = 7, dhal= "yes".
- iv. vegetables = 5, fruits = 1, dhal= "no".
- v. vegetables = 6, fruits = 6, dhal= "no".



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 25
- iii. number is 12
- iv. number is 24

Question 2
Not yet answered
Marked out of 1.0
 Flag question

Consider the given code segment and calculate the minimum number of test cases required for full statement coverage.

```
sum_tot = 0
x = int(input())
while x != 0:
    sum_tot += x
    if sum_tot >= 22:
        print('Total sum is', total_sum)
        break
    x = int(input())
print('Total sum is less than 21 and is equal to', sum_tot.)
```

Select one:

- i. 3
- ii. 5
- iii. 4
- iv. 1
- v. 2

[Next page](#)

Moodle

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Question 5 Not yet answered Marked out of 1.0 Flag question

Which of the following statement/s, is/are true related to "Provided Interfaces" of a Component?

Select one or more:

- i. Is shown using a "lolipop" notation.
- ii. It is an interface that the component realizes.
- iii. A component's provided interface describes the services provided by the component.
- iv. It is an interface that the component needs to function.
- v. Is shown using a "ball" notation.

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A S P I R E



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tion

Which of the following/s is/are not a correct way of representing an interface in a Component?

Select one or more:

- i. Stereotype notation
- ii. Ball and Socket notation
- iii. Whitebox notation
- iv. Assembly notation
- v. Hardware or Software Nodes

[Next page](#)

Consider the given code segment. when X=7 and Y=5 what is the statement coverage p
respectively?

```
while (X>Y) {  
    X = X - 5;  
    Y = Y - 2;  
    If ((X - Y) < 1) {  
        X = X + 1;  
    }  
    else {  
        X = X - 5;  
    }  
}
```

Select one:

- i. 88.9% and 75%
- ii. 77.7% and 75
- iii. 100% and 100%
- iv. 66.6% and 50%
- v. 11.1% and 25%



Question 4

Not yet answered
Marked out of 1.0

Flag question

What is the minimum number of test cases to achieve full statement coverage for the given below code?

```
Void checkvalue (int z) {  
    for (int value=6; value>2; value++) {  
        if (z==value) {  
            printf ("Good\n");  
        }  
    }  
    return z;  
}
```

Select one:

- i. 1
- ii. 4
- iii. 3
- iv. 5
- v. 2

Next page



☰ Quit

Finish at

Time left:

MULTIPLE

1 2

9 10

17 18

25 26

STRUCTURE

31 32

39 40

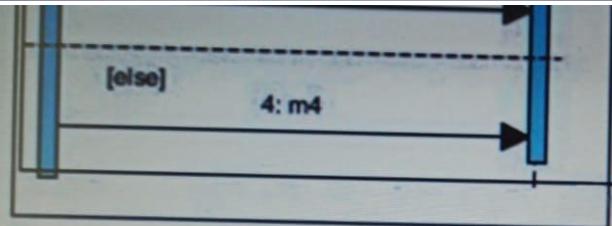
47 48

COMMENTS
51

45

COM

51

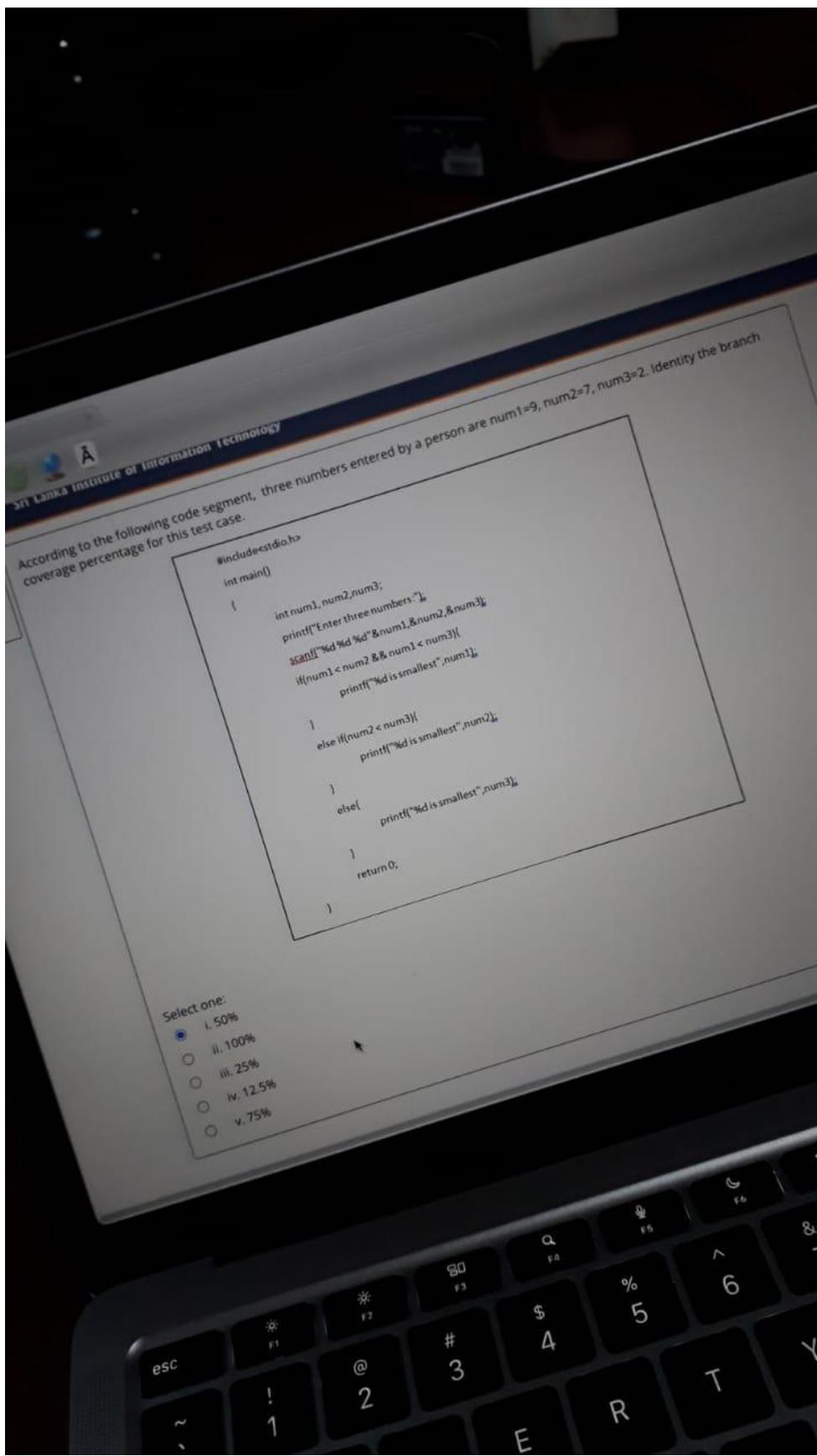


Select one or more:

- i. If A= 10, B=30, C= 100, M=50 actions which will execute are M2 and M4
- ii. If A= 100, B=30, C= 10, M=50 actions which will execute are M2 and M4
- iii. If A= 10, B=30, C= 80, M=50 actions which will execute are M2 and M3
- iv. If A= 15, B=30, C= 10, M=50 actions which will execute are M2 and M3
- v. If A= 10, B=30, C= 10, M=50 actions which will execute are M2 and M4

Next page





BSC1-BSCProject

Pid = "B100"
Title = "AI Project"
Duration : 1
InternalSupervisor = "R.M. Dias"

S2.Student

Sid = "T1452567"
Name = "Wenura De Silva"

ES1.ExternalSupervisor

SupName = "Asela Marapana"
Specialization = "IT"

On-Screen Keyboard

Esc Tab Caps Shift Fn Ctrl Alt

MSC1-MSCProject

Pid = "M303"
Title = "VR APP"
Duration : 2
InternalSupervisor = "A.G. Perera"

S3.Student

Sid = "T1234567"
Name = "Anusha Herath"

ES2.ExternalSupervisor

SupName = "Kanchi Silva"

it20269234 S

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5 answered out of 1.0 question

Which of the following statement/s is/are true for Optional Fragment?

Select one or more:

- i. If the guard condition failed, the behavior is skipped.
- ii. Optional fragment has only single operand, which may contain a guard condition.
- iii. Optional fragment has one or more operands, which must contain guard conditions.
- iv. If the guard condition satisfy, then the containing interaction abandons its normal execution and instead performs only the clause specified by the opt fragment.
- v. An optional fragment is a portion of an interaction that may be executed.

Next page

Quiz n

Finish attempt

Time left 1:3

MULTIPLE C

1	2
9	10
17	18
25	26

STRUCTUR

31	32
39	40

Module X

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J19082516 Gamaarachchi P. V. J19082516

Question 2
Not yet answered
Marked out of 1.0
Flag question

An organization has several email templates that the employees can use different purposes. Newsletter emails, Special offer emails, Milestone emails, new product announcement emails, Progress emails and Confirmation emails are few of them. When sending any of these emails to outside source, the user can add a disclaimer and digital signature to the end of the email. Also, we can encrypt the email before sending to enhance the security of the email content.

What is the design pattern that can be used, if you are asked to implement this email function?

Select one:

i. Observer
 ii. Flyweight
 iii. Decorator
 iv. Facade
 v. Singleton

[Next page](#)

Quiz navigation

Finish attempt ...
Time left 1:46:48

MULTIPLE CHOICE QUESTIONS

1	2	3	4	5	6	7
9	10	11	12	13	14	15
17	18	19	20	21	22	23
25	26	27	28	29	30	

STRUCTURED QUESTIONS

31	32	33	34	35	36	37	38
39	40	41	42	43	44	45	46
47	48	49	50				

COMMENTS AND CONCERN

51

idle

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Question 2
Not answered
Marked out of 1.0
Flag question

Which of the following statement/s is/are true for Optional Fragment?

Select one or more:

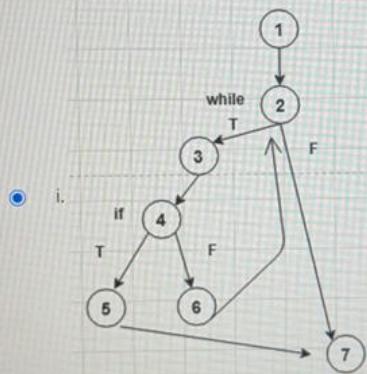
- i. If the guard condition satisfy, then the containing interaction abandons its normal execution and instead executes the optional fragment specified by the opt fragment.
- ii. An optional fragment is a portion of an interaction that may be executed.
- iii. Optional fragment has one or more operands, which must contain guard conditions.
- iv. If the guard condition failed, the behavior is skipped.
- v. Optional fragment has only single operand, which may contain a guard condition.

DELL

The image shows a close-up of a Dell laptop keyboard. The top row includes function keys F1 through F10. Below that is a numeric keypad with additional symbols like #, \$, %, ^, &, *, (,) and 1 through 9. The bottom row shows the letters Q, W, E, R, T, Y, U, I. The Dell logo is visible on the laptop's body above the keyboard.

```
n = 3  
while n > 0:  
    n += 1  
    if n == 5:  
        break  
    print(n)  
print('Loop ended.')
```

Select one:



esc

F1

F2

F3

F4

F5

F6

F7

**Question 2**

Not yet answered

Marked out of 1.0

 Flag question

Configuration Management consists of:

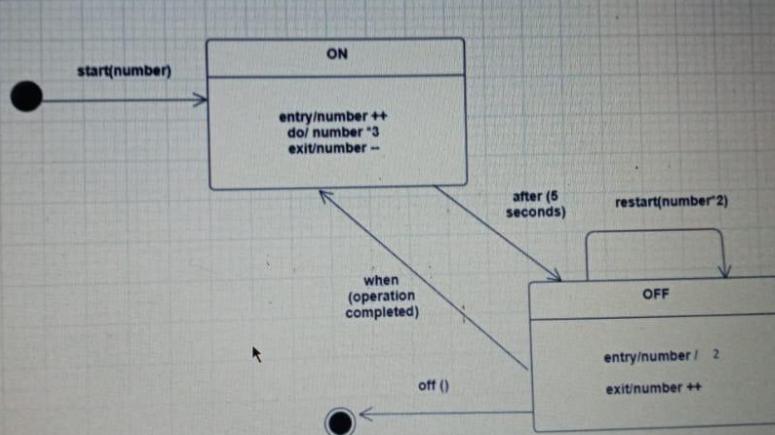
Select one or more:

- i. Release Management and System building
- ii. None of the mentioned
- iii. Change Management and distribution version control
- iv. Release management and centralized version control
- v. Version Management and Change Management

Marked out of 1.0

 Flag question

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



Select one:

- i. number is 12
- ii. number is 20

Finish attempt ...

Time left 1:55:32

MULTIPLE CHOICE QU

1	2	3	4
8	9	10	11
15	16	17	18
22	23	24	25
29	30		

STRUCTURED QUES

31	32	33	34
38	39	40	41
45	46	47	48

COMMENTS AND

51

Question 1

Not yet answered
Marked out of 1.0
 Flag question

Analyse the given code and identify the most suitable design pattern.

```
package assign2;

public interface HomeAlarm
{
    public void addDevices(Device d);
    public void modifyDevices(Device o);
    public void notifyDevices(String s1);
    public void theftDetected(int value);
}

import java.util.ArrayList;

public class Sensor implements HomeAlarm
{

    private int value;
    ArrayList deviceList;

    public Sensor() {
        deviceList = new ArrayList();
    }
}
```

```
subject.addDevices(device1);
subject.addDevices(device2);
subject.addDevices(device3);

subject.theftDetected(3);
}

}
```

Select one:

- i. Flyweight
- ii. Singleton
- iii. Observer
- iv. Facade
- v. Decorator



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

Select one or more:

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



Select the statement/s that is/are **true** about Deployment diagram.

Select one or more:

- i. Links between nodes are called as connections.
- ii. Execution environment resides on a particular device indicate by placing the nodes inside one another, nesting them.
- iii. A node is drawn as a rectangle with its type written inside.
- iv. Nodes are consists of hardware units only.
- v. Disk drivers and execution environments are software nodes.





idle

→ X | ① | ②

SLIIT
Sri Lanka Institute of Information Technology

on 10
not answered
1.00
marked out of 1.00
tag question

Which of the following statement/s, is/are **true** related to "Provided Interfaces" of a Component Diagram?

Select one or more:

i. It is an interface that the component needs to function.

ii. Is shown using a "lollipop" notation.

iii. It is an interface that the component realizes.

iv. Is shown using a "ball" notation.

v. A component's provided interface describes the services provided by the component.

iii. All the diagrams are correct.

iv.

BSC1:BSCProject

Pid = "B245"
Title = "AR Project"
Duration : 1
InternalSupervisor = "Kalani Wijedasa"

Sid =
Name =

v.

MSC1:MSCProject

Pid = "M101"
Title = "VR APP"
Duration : 2
InternalSupervisor = "A.D. Perera"

S1:
Sid = "IT123"
Name = "Asi

ES1:ExternalSupervisor

SupName = "Amith Silva"
Specialization = "IT"

DELL

F2 F3 F4 F5 F6 F7 F8 F9 F10
@ # \$

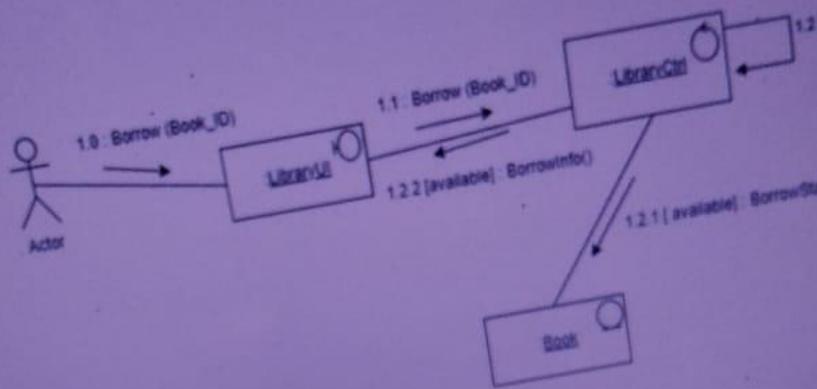
etExam!
Sri Lanka Institute of Information Technology

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of 1.0
question

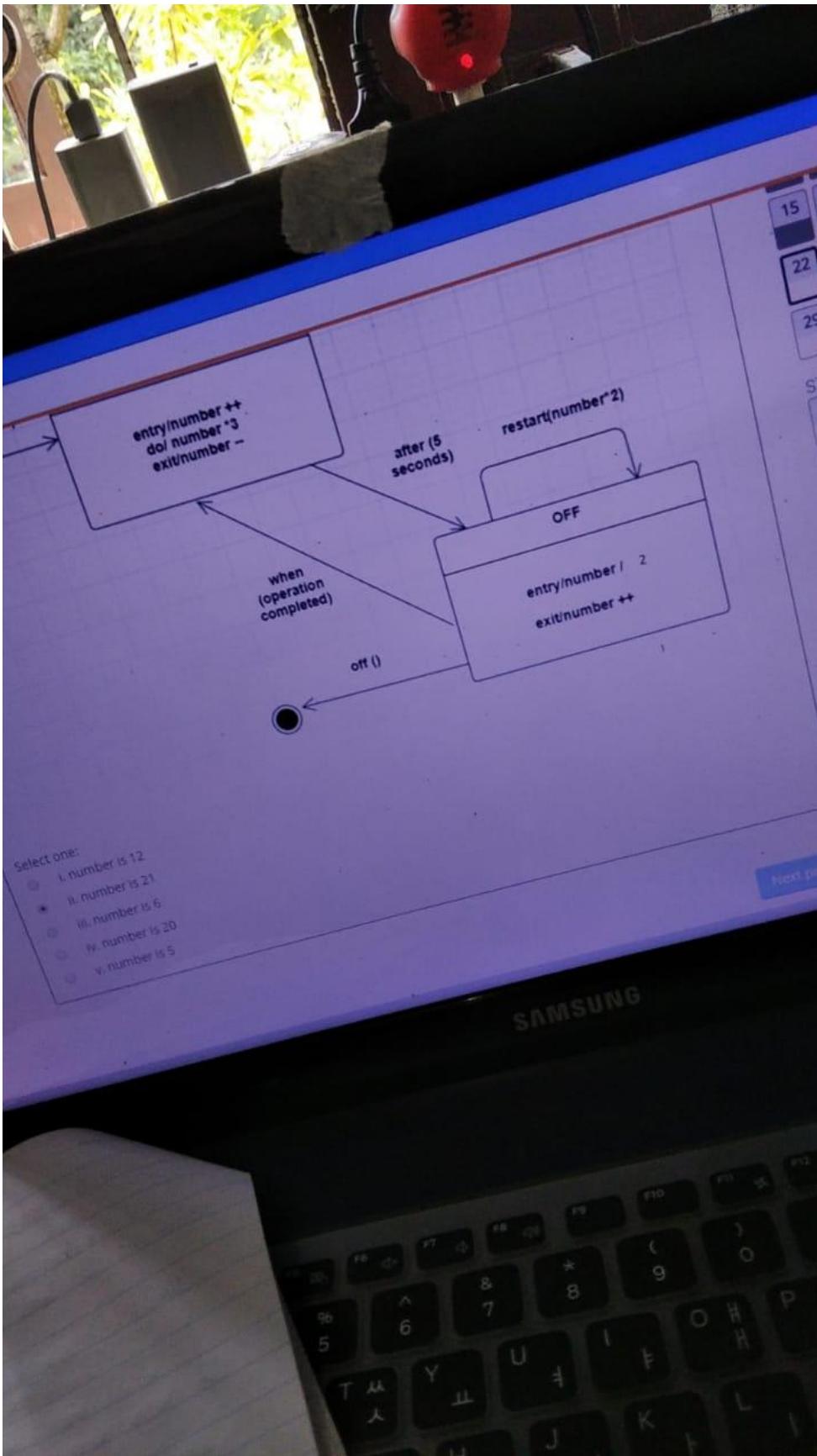
An organization has several email templates that the employees can use different purpose offer emails. Milestone emails, new product announcement emails, Progress emails and them. When sending any of these emails to outside source, the user can add a disclaimer of the email. Also, we can encrypt the email before sending to enhance the security of What is the design pattern that can be used, if you are asked to implement this email.

Select one:

- I. Decorator
- II. Observer
- III. Facade
- IV. Singleton
- V. Flyweight



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



```
}

public class MainProgram{
    public static void main(String []args){
        Channel channel1 = new SLNewsChannel();
        Channel channel2 = new UniversalChannel();
        NewsAgency news= new WorldWideNEWS();
        news.addChannel(channel1);
        news.addChannel(channel2);
        news.setNews("News is updated");
        news.setNews("Updated News");
    }
}
```

Select one:

- i. Observer
- ii. Facade
- iii. Decorator
- iv. Singleton
- v. Flyweight

Moodle

← → X | ⓘ ⓘ

Sri Lanka Institute of Information Technology

Question 19

Not yet answered

Marked out of 1.0

Flag question

When X=12 and Y=3, what is the statement coverage percentage in the below given code?

```
while (X>Y) {  
    X = X - 5;  
    Y = Y - 2;  
    if ((X - Y) < 1) {  
        X = X + 1;  
    }  
    else {  
        X = X - 5;  
    }  
}
```

Select one:

- i. 81.81%
- ii. 88.9%
- iii. 66.6%
- iv. 77.7%
- v. 100%

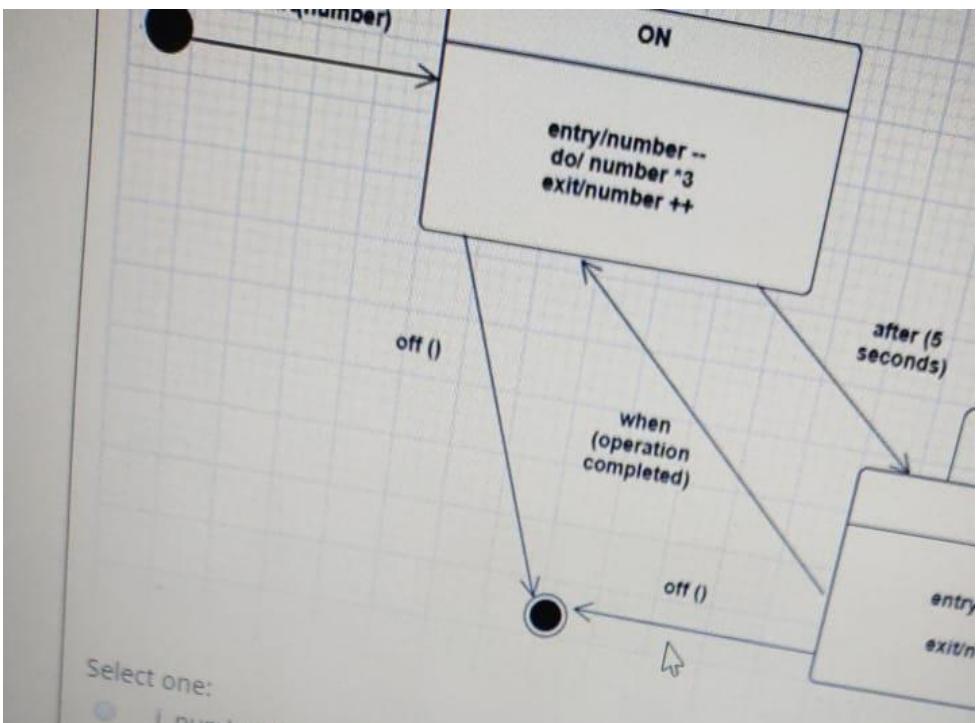
```
    }
}

public class MainProgram{
    public static void main(String []args){
        Channel channel1 = new SLNewsChannel();
        Channel channel2 = new UniversalChannel();
        NewsAgency news= new WorldWideNEWS();
        news.addChannel(channel1);
        news.addChannel(channel2);
        news.setNews("News is updated");
        news.setNews("Updated News");
    }
}
```

Select one or more:

- i. UniversalChannel
- ii. WorldWideNews
- iii. Channel
- iv. SLNewsChannel
- v. NewsAgency

DELL



Select one:

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



Time left 0:56:39

MULTIPLE CHOICE QU

1 2 3 4
8 9 10 11
15 16 17 18
22 23 24 25
29 30 31 32

The desktop user can access the "E-Hospital" web application through a [] browser, while a mobile user needs to setup the "E-HosMobile" mobile app from the App-Store. The main application of E-Hospital runs in a [] web server, which deployed in Dellinspriron5330. The E-Hospital application contains the subcomponents: [] patient, [] Doctor, Pharmacy and HospitalUI. The Patient component implements [] IPatientInterface, which used by both Doctor and Pharmacy components.

iPatient

iDoctor

iPharmacy

iHospital

iHospitalUI

iMobile

iWeb

Diagram illustrating the architecture of the E-Hospital system:

- The system consists of several components: iPatient, iDoctor, iPharmacy, iHospital, and iHospitalUI.
- iPatient interacts with iDoctor and iPharmacy.
- iDoctor interacts with iPatient, iHospital, and iMobile.
- iPharmacy interacts with iPatient, iDoctor, and iMobile.
- iHospital interacts with iPatient, iDoctor, and iMobile.
- iMobile interacts with iPatient, iDoctor, iPharmacy, and iHospital.
- iWeb interacts with iMobile.

The main application E-Hospital runs in a [] web server.

SAMSUNG

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34
Answered
out of 2.0
question

Is this statement True or False?
"Delivering software as a service (SaaS) reduces the problems of release management."

Select one:

True
 False

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Question 21
Not yet answered
Marked out of 1.0
 Flag question

Select the correct object/s for the given class.

Student
Sid:String
Name:String
Age:int
DoB:date
AddCourse():double

Select one or more:

I. **S1:Student**

Sid = ST10011
Name = "Amal Perera"
Age = 45
DoB = 11/2/1992

II. **S1:Student**

Sid:String
Name:String
Age:int
DoB:date



Moodle

AddCourse():double

Select one or more:

i. S1:Student
Sid = ST10011
Name = "Amal Perera"
Age = 45
DoB = 11/2/1992

ii. S1:Student
Sid:String
Name:String
Age:int
DoB:date

iii. :Student
Sid = "ST15555"
Name = "Amila Silva"
Age = 24
DoB = 4/10/1990

iv. S1:Student
Sid = "ST11233"
Name = "Senaka"
Age = 23
DoB = 12/7/1991



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

```
sequenceDiagram
    actor Actor
    participant Library
    participant UserCtrl
    participant Book
    Actor->>Library: 1.0: Borrow (Book_ID)
    Library->>UserCtrl: 1.1: Borrow (Book_ID)
    UserCtrl->>Book: 1.2.1 [available]: BorrowStatus()
    UserCtrl-->>Book: 1.2.2 [available]: Borrow()
    Book-->>UserCtrl: 1.2 [available]: ToBorrow()
```

Select one or more:

- I. BorrowStatus() message is send only if the book is available.
- II. There are no loop fragments in corresponding sequence diagram.
- III. There is a Opt fragment in corresponding sequence diagram.
- IV. ToBorrow() message can execute even if the book is not available.
- V. Message 1.2.2 is repeating.

Moodle

Question 19
yet answered
Marked out of 1.0
Flag question

You are given the following state chart diagram and three statements. Select the **Correct statement/s** about the given state chart.

A. Insert ATM card is an activity.
B. Check card is an activity.
C. When (outstanding<=0) is an event

Select one or more:

- i. Only A and C
- ii. Only A and B
- iii. C only
- iv. Only B and C
- v. B correct



Which of the following test cases will ensure that statement "06" is ex

- 01 Input number of fruits in kilograms
- 02 Input number of vegetables kilograms
- 03 If fruits > 5kg and vegetables > 3kg then
- 04 Input Do you want to Dhal in less price (Yes / No)
- 05 If Dhal= "No"
- 06 Print "No discount calculation" →
- 07 End If
- 08 End If.

Select one:

- i. vegetables = 5, fruits = 1, dhal= "no".
- ii. vegetables = 6, fruits = 6, dhal= "no".
- iii. vegetables = 4, fruits = 7, dhal= "yes".
- iv. vegetables = 1, fruits = 7, dhal= "no".
- v. vegetables = 2, fruits = 4, dhal= "yes".

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Consider the given physical diagram. Then drag and drop correct answers to appropriate places.

The diagram illustrates a physical architecture with three subsystems:

- WebStore** (top-left): Contains a **:SearchEngine** component. It has an interface **ProductSearch** on its left boundary and a connector labeled **internal structure** connecting to the **:SearchEngine**.
- Warehouses** (top-right): Contains a **:Inventory** component. It has an interface **Search Inventory** on its left boundary and a connector labeled **internal structure** connecting to the **:Inventory**.
- Accounting** (bottom-right): Contains four components: **:Orders**, **:Customers**, **:Accounts**, and **:Authentication**. **:Orders** has an interface **Manage Orders** on its left boundary. **:Customers** has an interface **Manage Customers** on its left boundary. **:Accounts** has an interface **Manage Accounts** on its left boundary. **:Authentication** has an interface **UserSession** on its left boundary and a connector labeled **internal structure** connecting to the **:Authentication** component.

Interactions between components are shown by connectors:

- ProductSearch** connects to **Search Inventory** via a connector labeled **internal structure**.
- Search Inventory** connects to **Manage Inventory** via a connector labeled **internal structure**.
- Manage Inventory** connects to **Manage Orders** via a connector labeled **internal structure**.
- Manage Orders** connects to **Manage Inventory** via a connector labeled **internal structure**.
- Manage Orders** connects to **Manage Customers** via a connector labeled **internal structure**.
- Manage Customers** connects to **Manage Accounts** via a connector labeled **internal structure**.
- UserSession** connects to **Manage Customers** via a connector labeled **internal structure**.
- Manage Customers** connects to **Manage Accounts** via a connector labeled **internal structure**.

Annotations in the diagram area:

- Delegation** connectors to connect with **Warehouses** subsystem.
- require** connectors to connect with **Warehouses** subsystem.
- Assembly** connector.

Bottom keyboard view: **ESC F1 F2 F3 F4 F5 F6**

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Which of the following statement/s is/are true for Optional Fragment?

Select one or more:

- i. If the guard condition failed, the behavior is skipped.
- ii. If the guard condition satisfy, then the containing interaction abandons its normal execution and instead performs specified by the opt fragment.
- iii. Optional fragment has one or more operands, which must contain guard conditions.
- iv. Optional fragment has only single operand, which may contain a guard condition.
- v. An optional fragment is a portion of an interaction that may be executed.



Question 24

Not yet answered

Marked out of 1.0

 Flag question

Which of the following/s is/are the main parts of component diagram?

Select one or more:

- i. Relationship between interfaces
- ii. Protocols
- iii. Interfaces
- iv. Object
- v. Components

[Next page](#)

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Moodle

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Question 15

Not yet answered

Marked out of 1.0

Flag question

Configuration Management consists of:

Select one or more:

I. Version Management and Change Management

II. Change Management and distribution version control

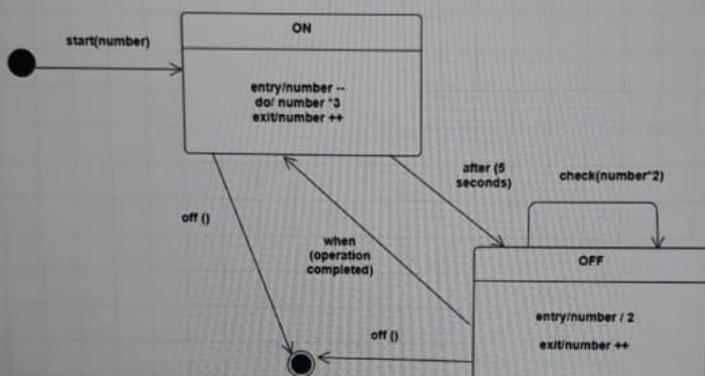
III. None of the mentioned

IV. Release management and centralized version control

V. Release Management and System building

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

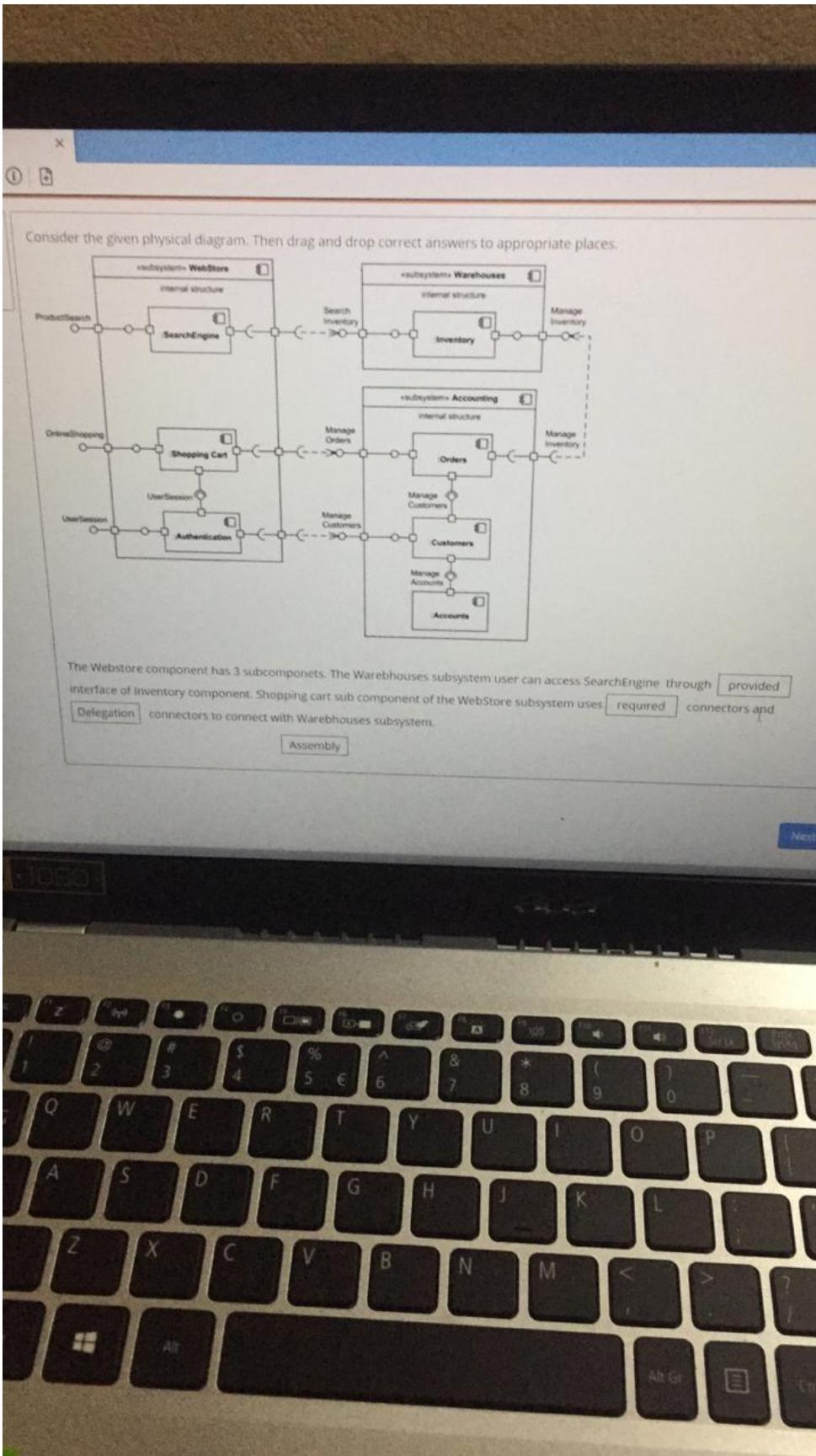
- start(6)
- after(5 seconds)
- when(operation completed)
- off()

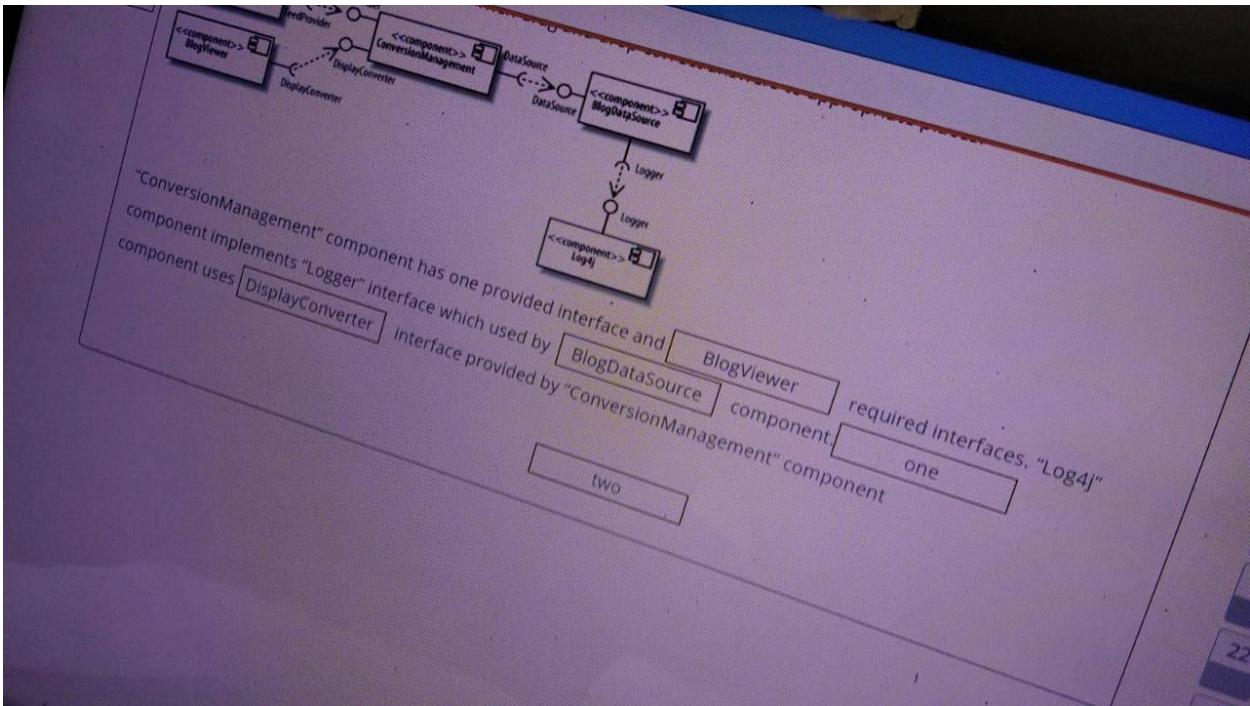


Select one:

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







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Select the correct matches.

System building is the process of compiling and linking software components into an executable system.

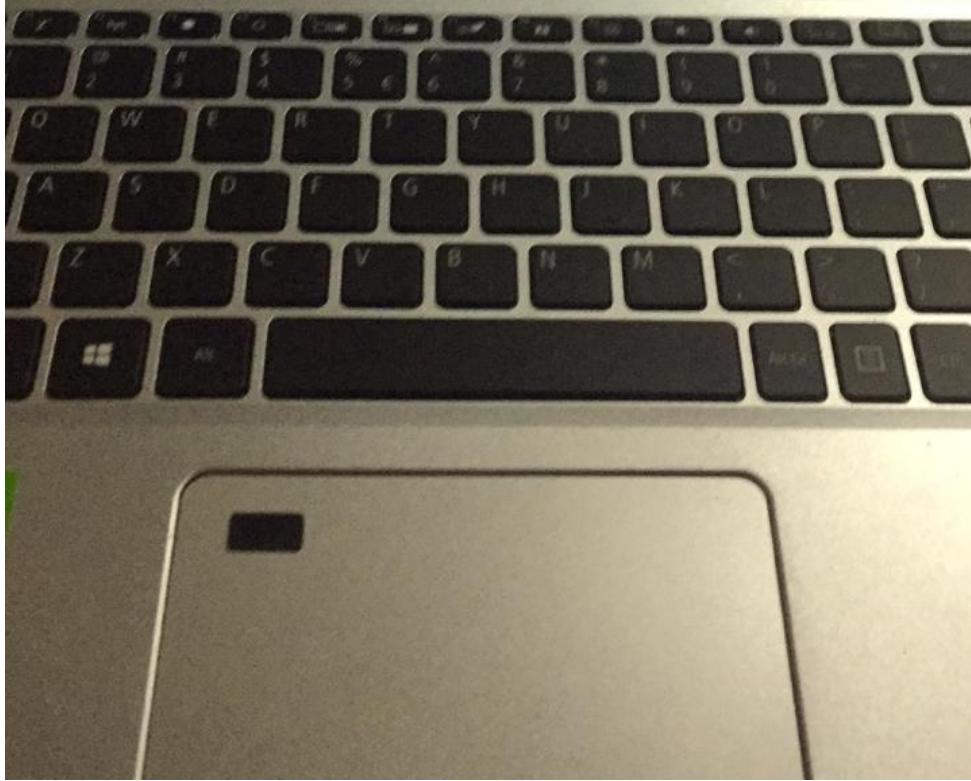
Primary goal of the Incident Management process is Restore normal service operation as quickly as possible.

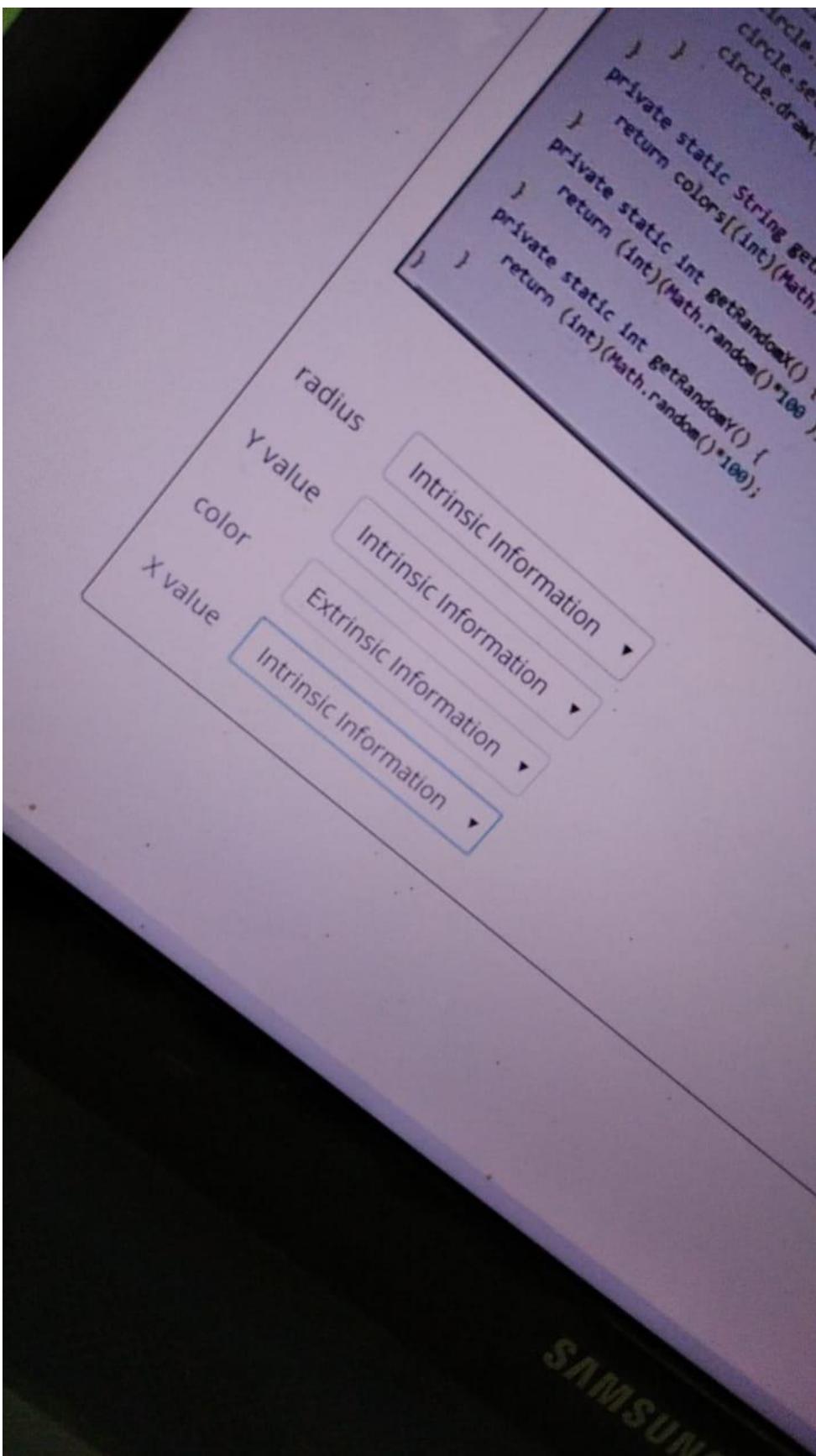
Incident is Unplanned interruption to an IT service or reduction in the quality of an IT service.

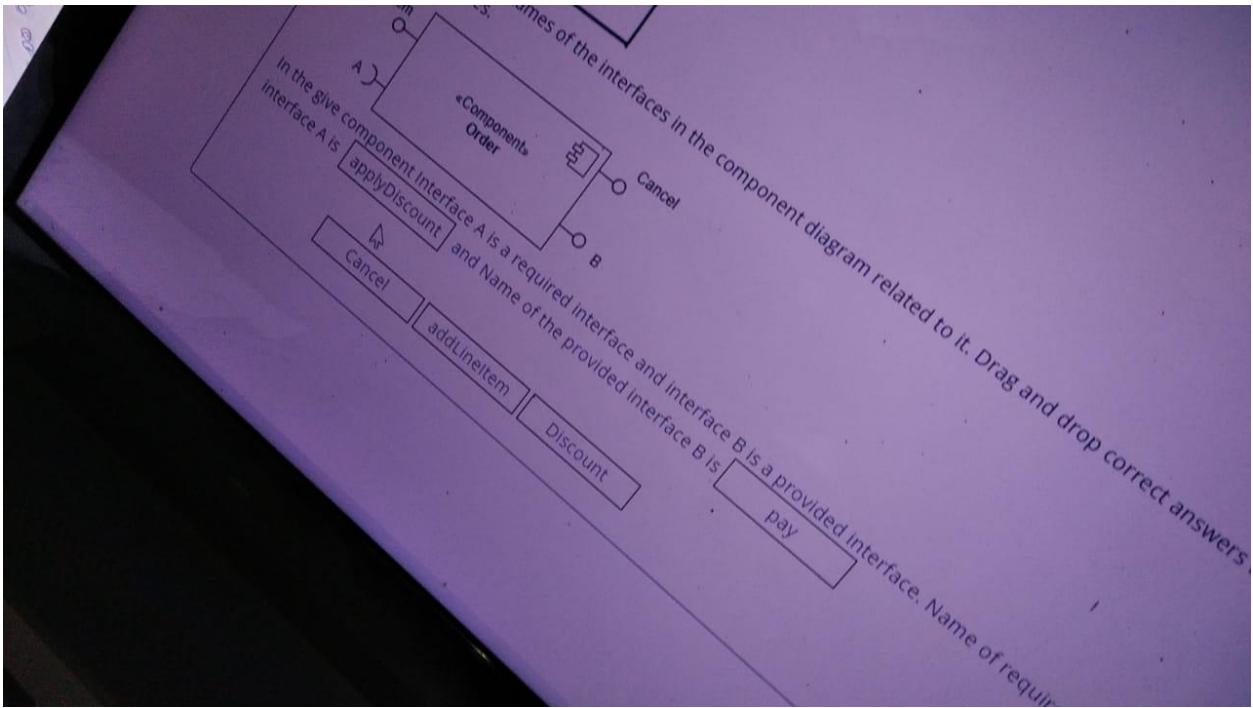
Factors that influencing system release planning are Competition, Platform changes, Technical quality of the system and Marketing requirements.

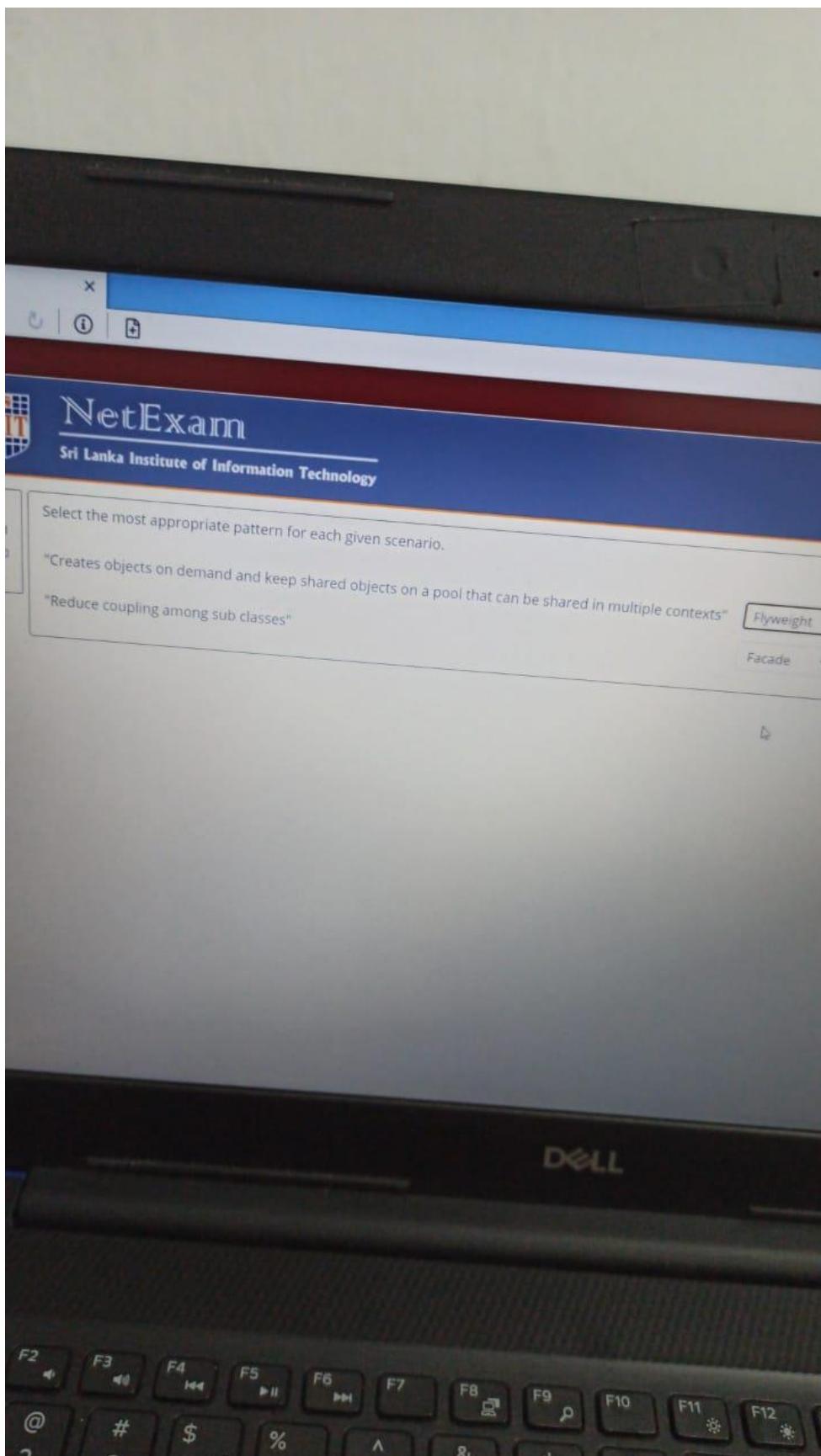
Change management is Intended to ensure that system evolution is a managed process and that priority is given to the most urgent and cost effective changes.

Next page









X C | ⌂ | ⌂

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Question 31
Not yet answered
Marked out of 2.0
Flag question

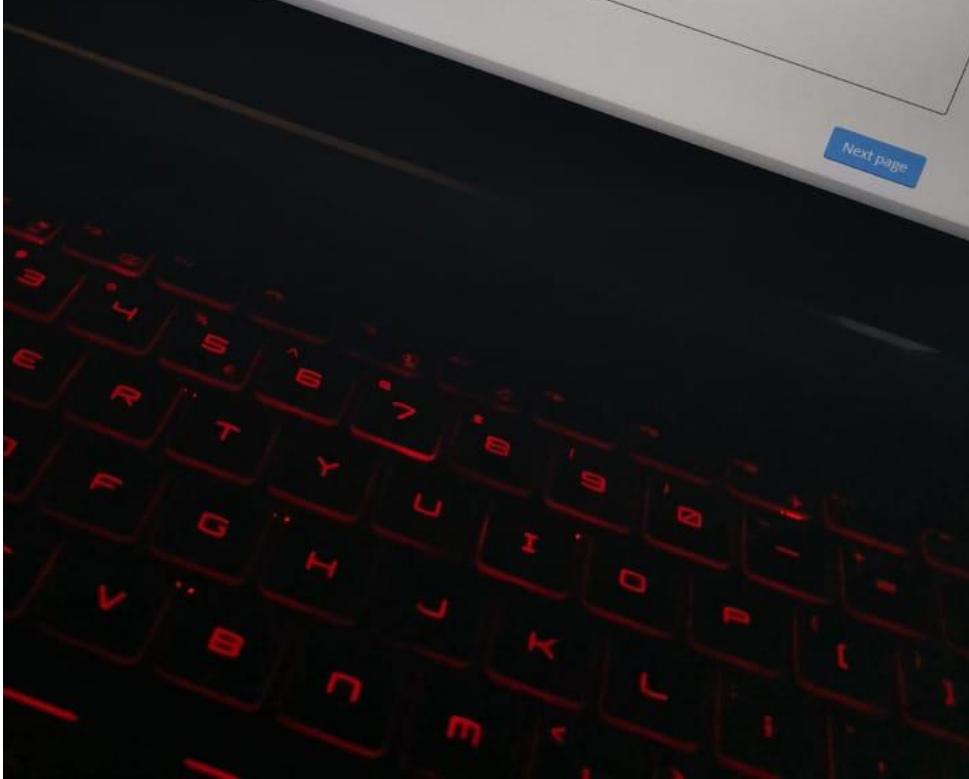
You have given the following code segment.

```
n = 3
while n > 0:
    n += 1
    if n == 5:
        break
    print(n)
print('Loop ended.')
```

Statement coverage percentage in the above code is % and branch coverage percentage can be calculated as %.

40 50 60

Next page



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Question 33
Not yet answered
Marked out of 2.0
Flag question

Below is white box view of interfaces of Order component.

```

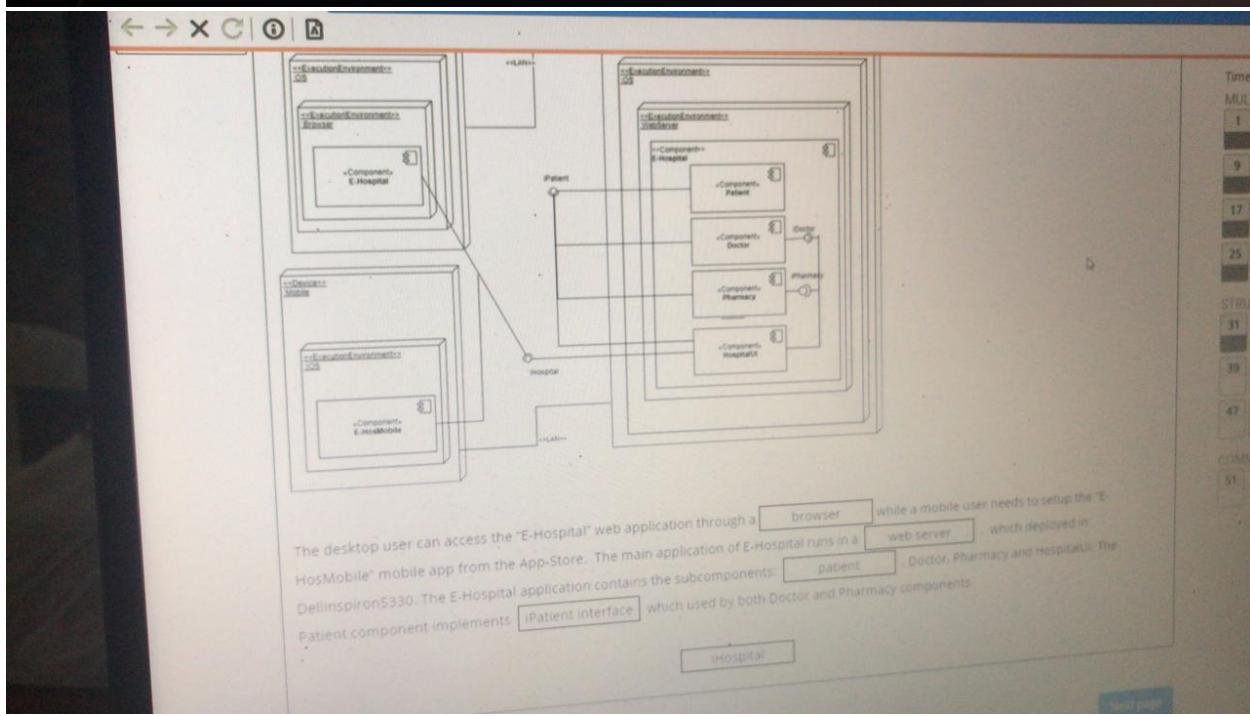
    graph TD
        Order[Order] -- "cancel" --> A
        Order -- "addLineItem" --> A
        Order -- "applyDiscount" --> B
    
```

Identify the correct names of the interfaces in the component diagram related to it. Drag and drop correct answers to appropriate places.

In the given component Interface A is a required interface and interface B is a provided interface. Name of required interface A is **applyDiscount** and Name of the provided interface B is **pay**

Discount **addLineItem** **Cancel**

Next page



31
1 out of 2.0
lag question

Select the correct matches.

Change management	intended to ensure that system evolution is a managed process and that priority is given to the most urgent and cost-effective changes.
Factors that influencing system release planning are	Competition, Platform changes, Technical quality of the system and Marketing requirements
Primary goal of the Incident Management process is	Restore normal service operation as quickly as possible
Incident is	Unplanned interruption to an IT service or reduction in the quality of an IT service.
System building is	the process of compiling and linking software components into an executable system.

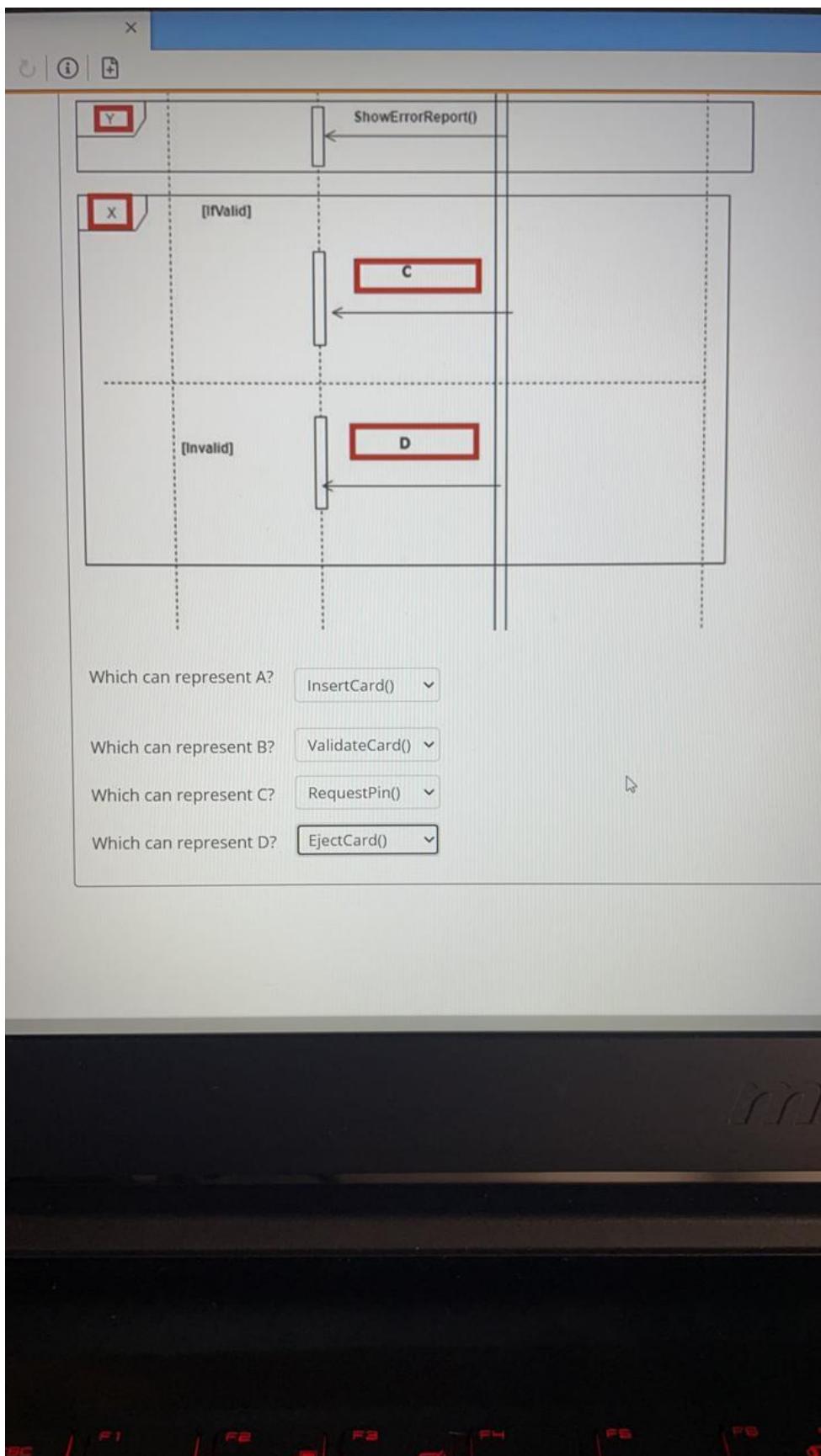
Next page

addLineItem
pay
<<required interfaces>>
applyDiscount

Identify the **correct** names of the interfaces in the component diagram related to it. Drag and drop correct answers to

In the give component Interface A is a required interface and interface B is a provided interface. Name of required interface is **applyDiscount** and Name of the provided interface B is **pay**

Discount **addLineItem** **Cancel**



Moodle

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Question 26

Not yet answered

Marked out of 1.0

Flag question

Which of the following/s is/are the main parts of component diagram?

Select one or more:

- i. Protocols
- ii. Components
- iii. Interfaces
- iv. Relationship between interfaces
- v. Object

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ed
2.0
on

State true or false for the following statement
 "Observer pattern does not maintain one to many dependency among objects"

Select one:

True
 False

Question 34
 Not yet answered
 Marked out of 2.0
[Flag question](#)

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

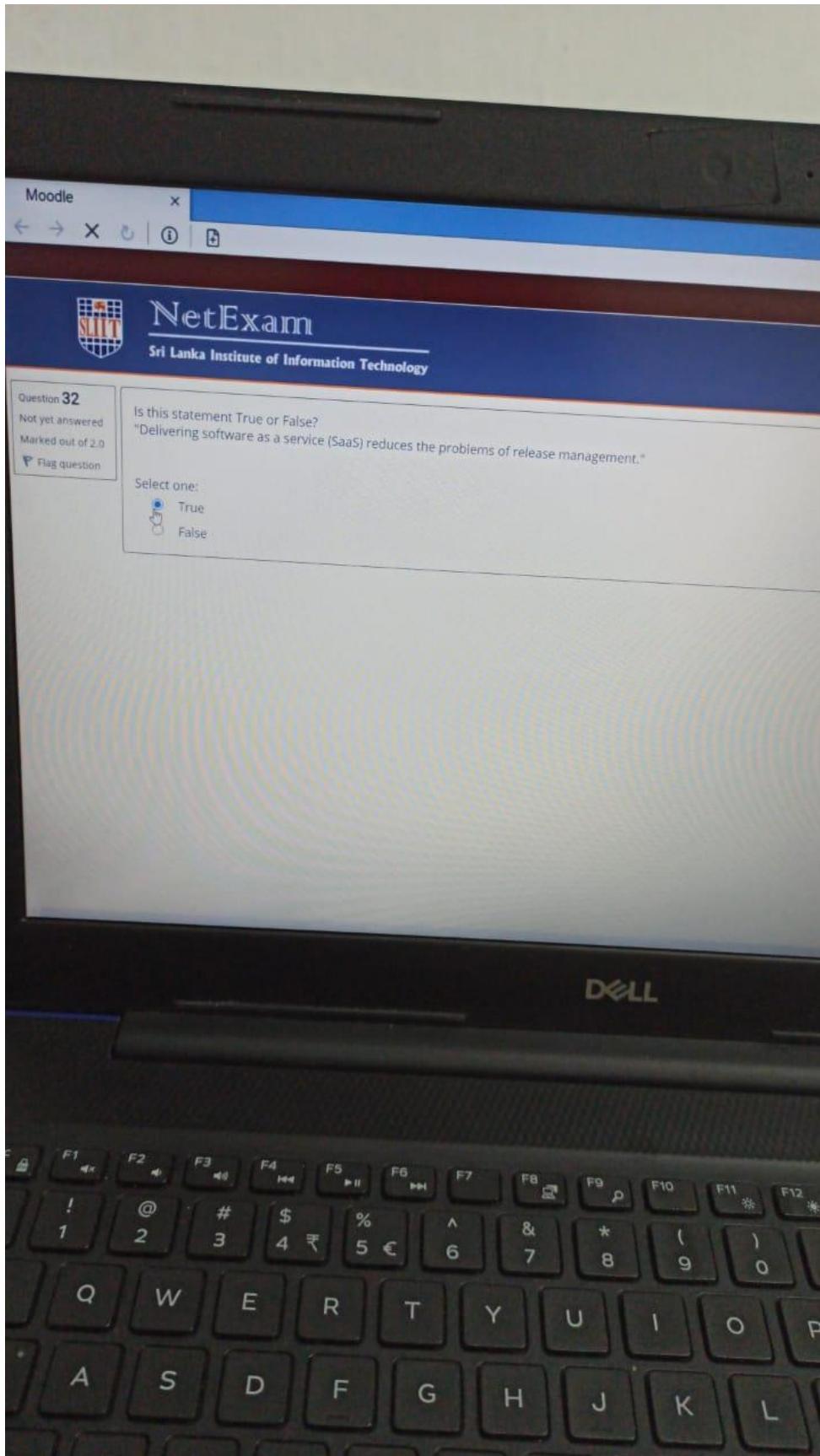
- start(6)
- after(5 seconds)
- off()

```

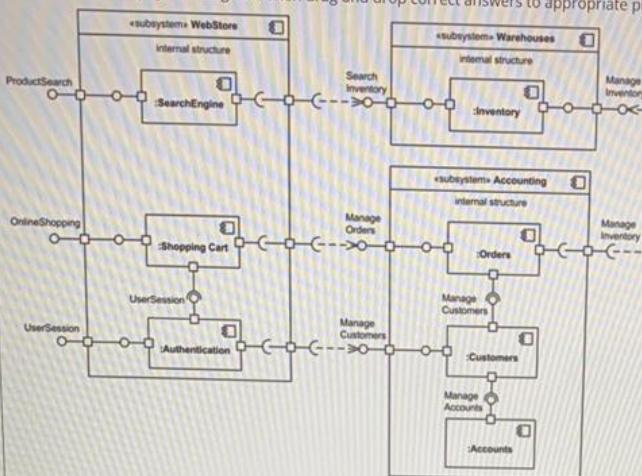
graph LR
    Start(( )) -- start(number) --> ON[ON]
    ON -- entry/number-->|do number +3| ON
    ON -- exit/number++ --> ON
    ON -- off() --> OFF[OFF]
    ON -- when(operation completed) --> OFF
    OFF -- after(5 seconds) --> OFF
    OFF -- check(number*2) --> OFF
    OFF -- entry/number / 2 -->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

value of the number variable is :

Quiz navigation
 Finish attempt ...
 Time left 0:54:09
 MULTIPLE CHOICE
 1 2 3
 9 10 11
 17 18 19
 25 26 27
 STRUCTURED QUESTIONS
 31 32 33
 39 40 41
 47 48 49
 COMMENTS AND C
 51



Consider the given physical diagram. Then drag and drop correct answers to appropriate places.



The Webstore component has 3 subcomponents. The Warehouses subsystem user can access SearchEngine through interface of Inventory component. Shopping cart sub component of the WebStore subsystem uses [] connectors and [] connectors to connect with Warehouses subsystem.

Assembly required Delegation provided

[Next page](#)

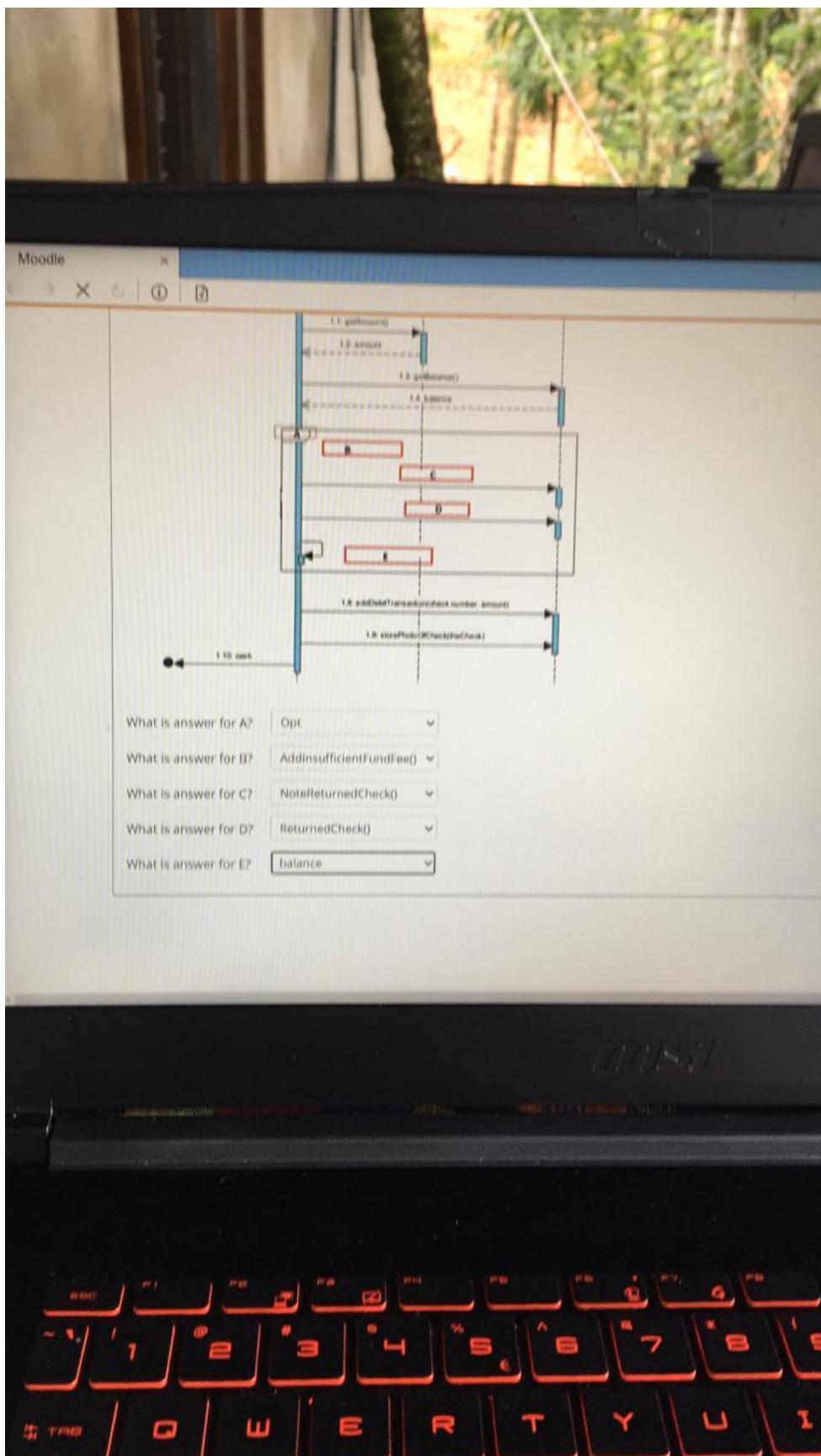
```
    circle.setY(getRandomY());
    circle.setRadius(100);
    circle.draw();
}
}

private static String getRandomColor() {
    return colors[(int)(Math.random()*colors.length)];
}

private static int getRandomX() {
    return (int)(Math.random()*100 );
}

private static int getRandomY() {
    return (int)(Math.random()*100);
}
```

X value	Intrinsic Information ▾
Y value	Intrinsic Information ▾
radius	Intrinsic Information ▾
color	Extrinsic Information ▾



```
}

public class ReportMain {
    /**
     * @param args the command line arguments
     */
    public static void main(String[] args) {
        // TODO code application logic here
        ReportGenerator reportGenerator = new ReportGenerator();
        reportGenerator.generateReport("HTML", null, null);
        reportGenerator.generateReport("PDF", null, null);
    }
}
```

What is the type of "ReportGenerator" class? Choose...
↳ Client Class

What is the type of "ReportData" class?
Choose...

What is the type of "ReportMain" class?
Choose...

DELL

F6 F7 F8 F9 F10 F11

Date: _____

X

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Initialy, the washing machine is in the Power off state. It will move to Power on state once switched on. At the entry of the Power on State, the washing machine is turn on its water level indicator and its operational mode. If the user wanted, can change the operational mode or water level pushing the relevant buttons. There is assigned no of kilos per a wash if its exceeded, the washing machine will play a beep sound before its operation. So, the user has to remove some cloths out of it. While in the Power on state, the water will fill up and will move to Operating state. While in the Operating state the timer will tick on and washing count will decrement automatically. During the operational time, if any problem occur, machine will notify with a sound and will stop it operation. The user has to check the issue and when its solved (problem with water supply), automatically it will start back.

How many states in the scenario?

Answer : 3 States

Next Back

Quiz navigation

Finish attempt

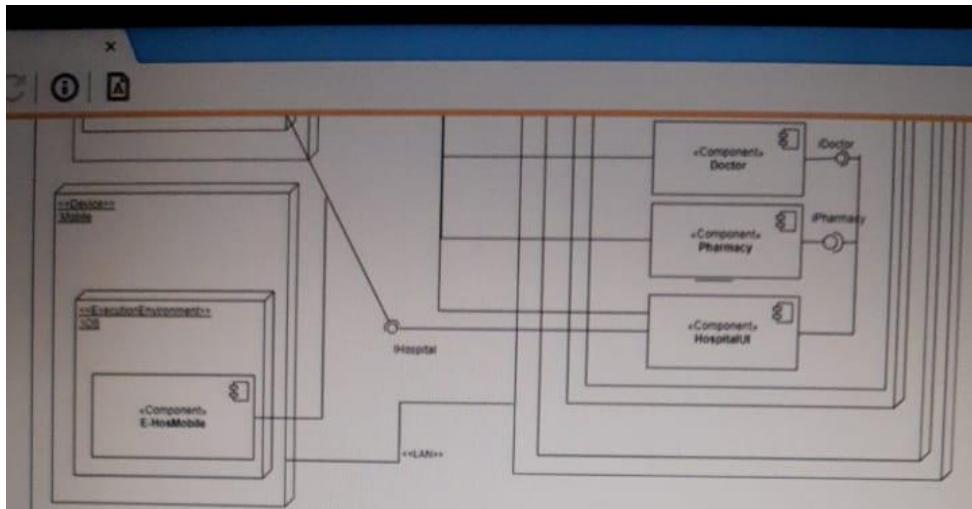
Time left: 0:40:26

MULTIPLE CHOICE QUESTIONS

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	32	33	34	35	36
37	38	39	40	41	42
43	44	45	46	47	48
49	50	51	52	53	54
55	56	57	58	59	60

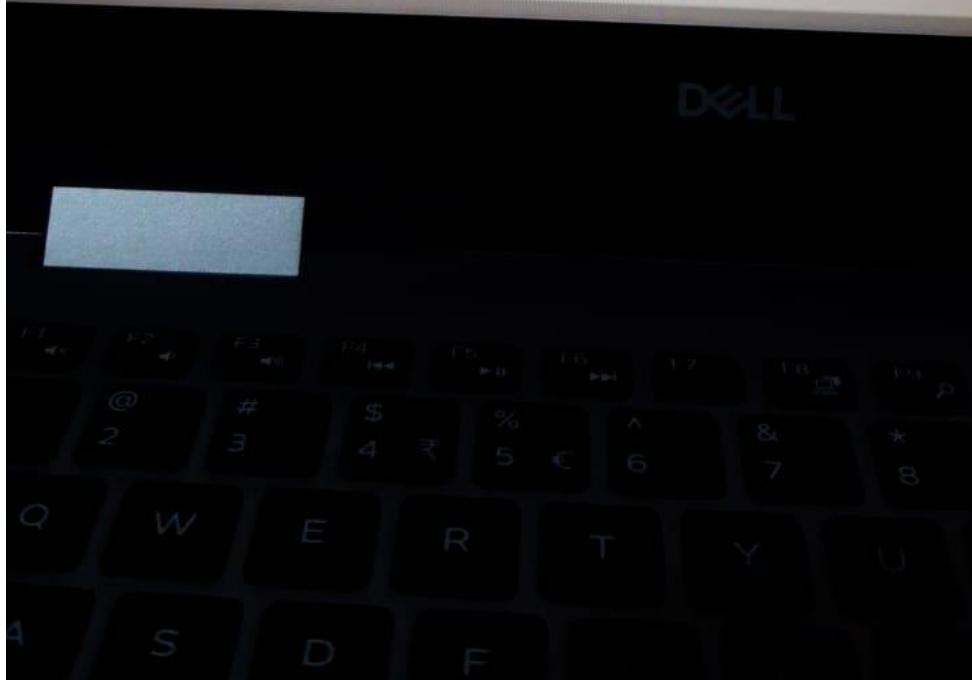
STRUCTURED QUESTION BANK

ANSWER AND CONFERANCE



The desktop user can access the "E-Hospital" web application through a **browser** while needs to setup the "E-HosMobile" mobile app from the App-Store. The main application of E-Hos **web server**, which deployed in DellInspiron5330. The E-Hospital application contains the subcomponents: **patient**, Doctor, Pharmacy and HospitalUI. The Patient component **iPatient interface** which used by both Doctor and Pharmacy components.

iHospital



```
/**  
 * @param args the command line arguments  
 */  
public static void main(String[] args) {  
    // TODO code application logic here  
    ReportGenerator reportGenerator = new ReportGenerator();  
    reportGenerator.generateReport("HTML", null, null);  
    reportGenerator.generateReport("PDF", null, null);  
}
```

t is the type of "ReportGenerator" class?
t is the type of "ReportData" class?
t is the type of "ReportMain" class?

Façade Interface
Client Class
Concrete Component



DELL

F6 F7

```
}

class ReportMain {

    @param args the command line arguments

    public static void main(String[] args) {
        // TODO code application logic here

        ReportGenerator reportGenerator = new ReportGenerator();

        reportGenerator.generateReport("HTML", null, null);

        reportGenerator.generateReport("PDF", null, null);
    }
}
```

Type of "ReportMain" class? Client Class

Type of "ReportData" class? Subsystem Class

Type of "ReportGenerator" class? Façade Interface

