Q1) One of the fields on a form contains a text box which accepts numeric values in the range of 18 to 25. Identify the invalid Equivalence class.

a) 17

b) 19

c) 24

d) 21

Answer:

Class I: values < 18 => invalid class
Class II: 18 to 25 => valid class
Class III: values > 25 => invalid class
17 fall under an invalid class. 19, 24 and 21 falls under valid class. **So the answer is 'A'**

Q2) Input Box should accept the Number 1 to 10. Identify Equivalence partitioning and Boundary values for testing.
Answer:

The equivalence partitioning is:
Valid: 1to 10
Invalid:1> and <10
i.e. Case1- Less than 1
Case2- greater than 10.

Boundary values:
As we know that in boundary we check only the boundaries so,
We check on boundary values: 0,1,10,11.

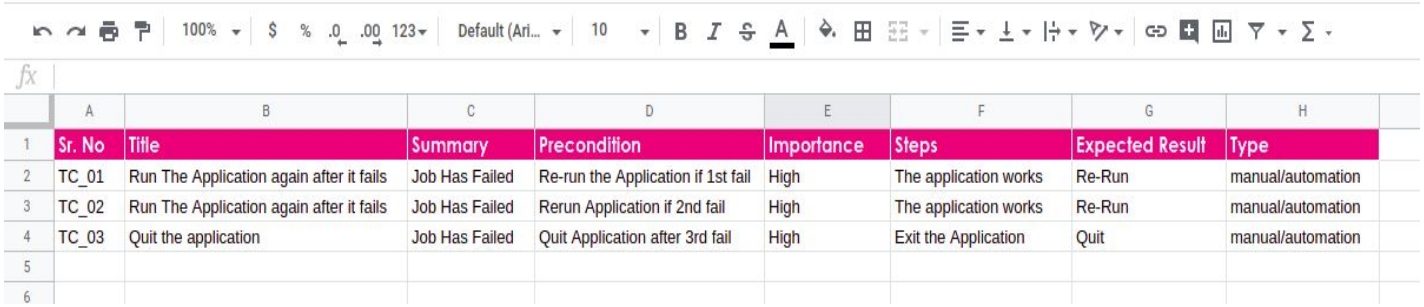
Q3) Why Equivalence & Boundary Analysis Testing is used?
Answer:

Boundary Value Testing is another black box test design technique and it is used to find the errors at boundaries of input domain rather than finding those errors in the center of input.
Equivalence Partitioning Testing is very important to find out errors at boundaries, inside the boundary and outside the boundary as well so that we can have various classes of test cases.

Q4) Write Test Cases For This Scenario:
If A Job Fails It Should Get Restarted Again. This Should Happen For Three Times. If It Fails again, then It should quit.

Answer:

https://docs.google.com/spreadsheets/d/17qFU7d8McBtXm3DoVS9ooYHDNY_OC38bd9L5iM8x3uw/edit?usp=sharing

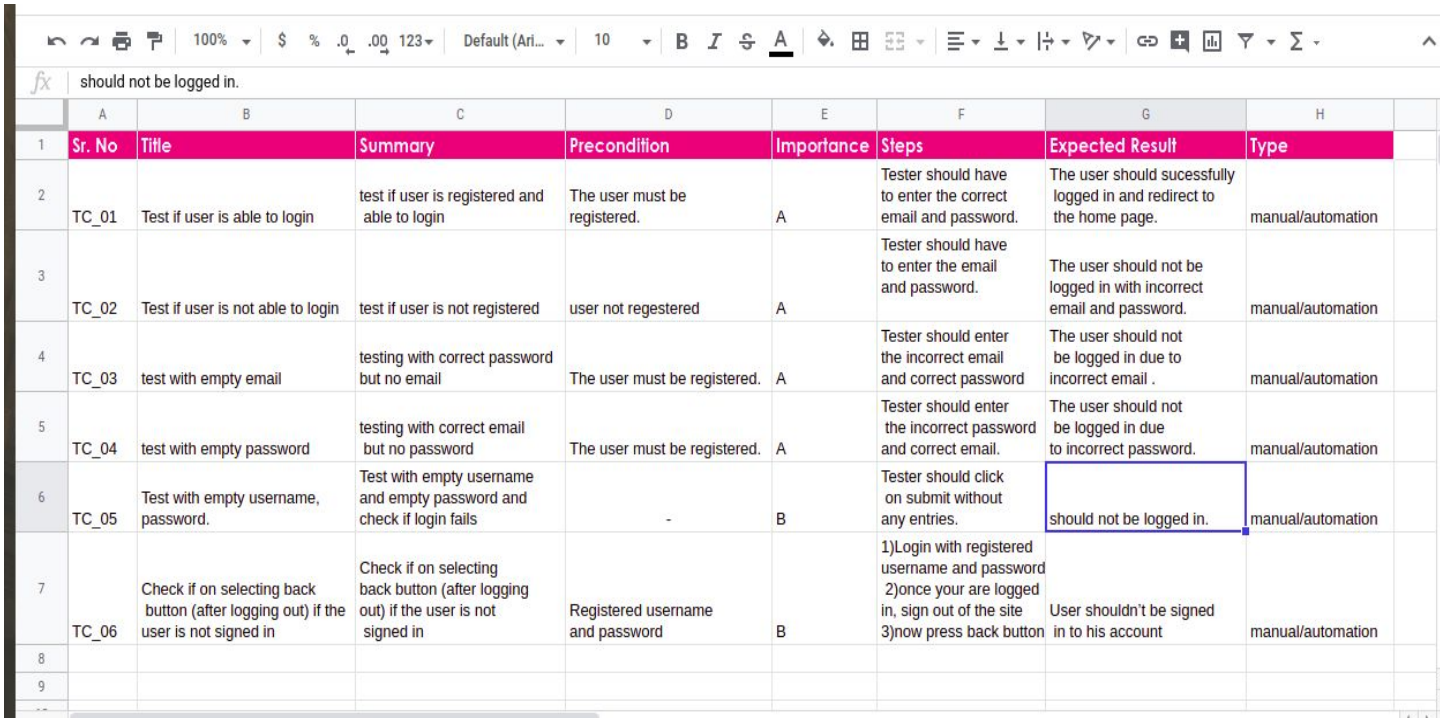


Sr. No	Title	Summary	Precondition	Importance	Steps	Expected Result	Type
TC_01	Run The Application again after it fails	Job Has Failed	Re-run the Application if 1st fail	High	The application works	Re-Run	manual/automation
TC_02	Run The Application again after it fails	Job Has Failed	Rerun Application if 2nd fail	High	The application works	Re-Run	manual/automation
TC_03	Quit the application	Job Has Failed	Quit Application after 3rd fail	High	Exit the Application	Quit	manual/automation

Q5) Write The Test Case/scenario For A Login Page?

Answer:

https://docs.google.com/spreadsheets/d/13XpTZwuj7nRnJW7RUjbXr6G9tLkdRaBpVq_bKPaGHtg/edit?usp=sharing

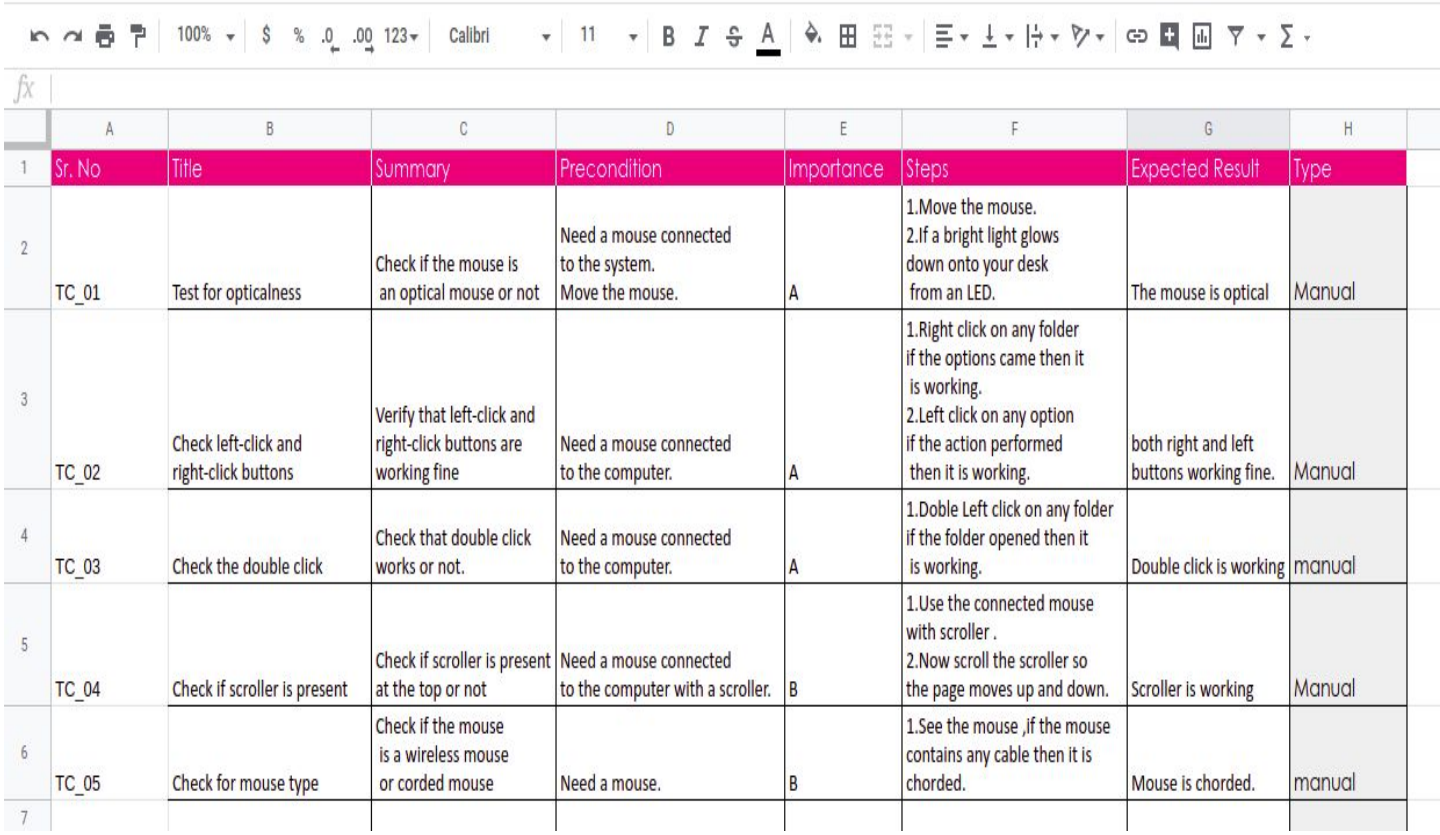


Sr. No	Title	Summary	Precondition	Importance	Steps	Expected Result	Type
TC_01	Test if user is able to login	test if user is registered and able to login	The user must be registered.	A	Tester should have to enter the correct email and password.	The user should sucessfully logged in and redirect to the home page.	manual/automation
TC_02	Test if user is not able to login	test if user is not registered	user not regestered	A	Tester should have to enter the email and password.	The user should not be logged in with incorrect email and password.	manual/automation
TC_03	test with empty email	testing with correct password but no email	The user must be registered.	A	Tester should enter the incorrect email and correct password	The user should not be logged in due to incorrect email .	manual/automation
TC_04	test with empty password	testing with correct email but no password	The user must be registered.	A	Tester should enter the incorrect password and correct email.	The user should not be logged in due to incorrect password.	manual/automation
TC_05	Test with empty username, password.	Test with empty username and empty password and check if login fails	-	B	Tester should click on submit without any entries.	should not be logged in.	manual/automation
TC_06	Check if on selecting back button (after logging out) if the user is not signed in	Check if on selecting back button (after logging out) if the user is not signed in	Registered username and password	B	1)Login with registered username and password 2)once your are logged in, sign out of the site 3)now press back button	User shouldn't be signed in to his account	manual/automation

Q6) What Are The Test Cases/scenario For Mouse? (To verify the functionalities of a mouse)

Answer:

https://docs.google.com/spreadsheets/d/1_DQvoX41M_WpNixkuL0n-OFOtqLGkUxAIJs013g9ll0/edit?usp=sharing

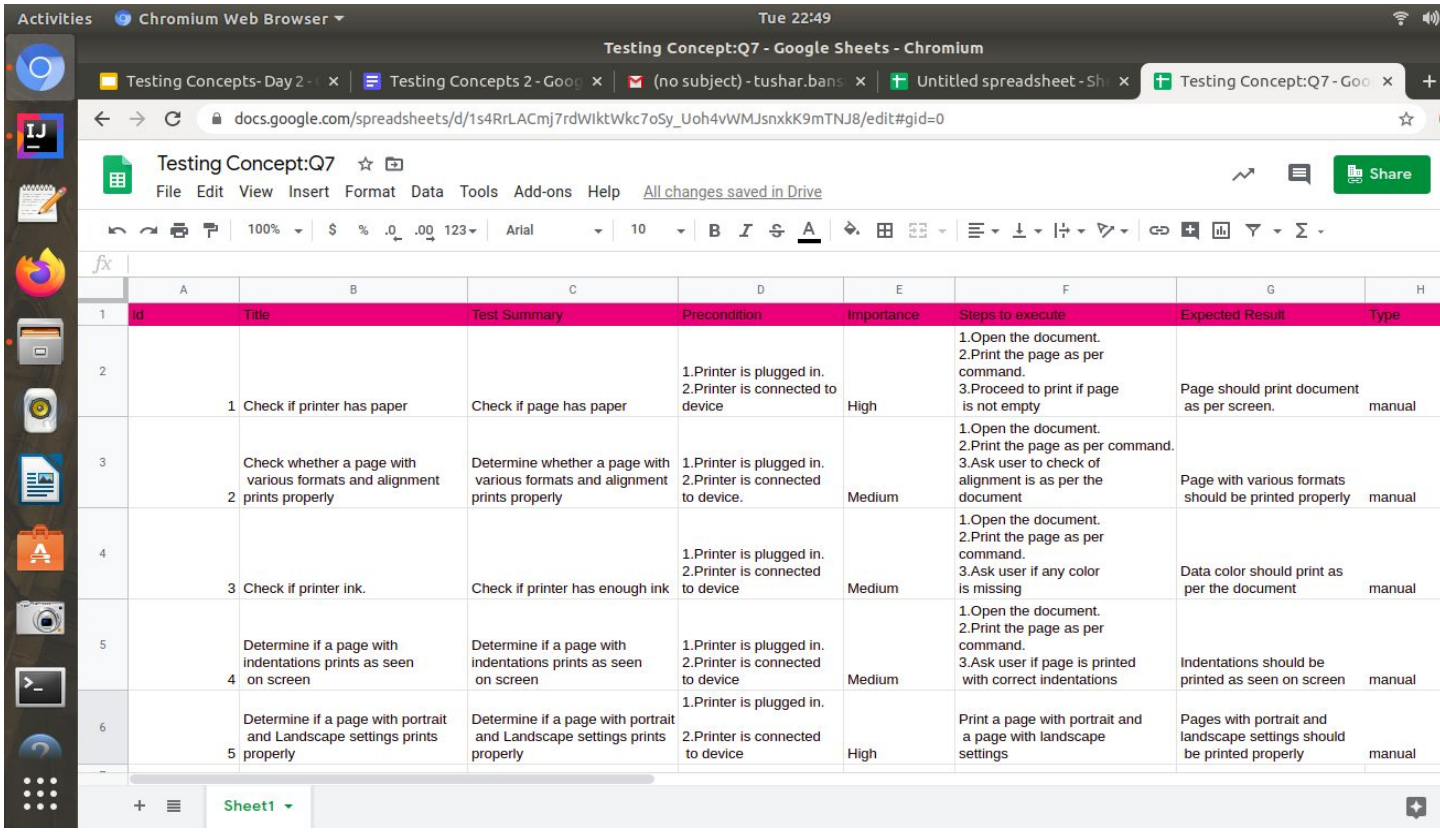


Sr. No	Title	Summary	Precondition	Importance	Steps	Expected Result	Type
TC_01	Test for opticalness	Check if the mouse is an optical mouse or not	Need a mouse connected to the system. Move the mouse.	A	1.Move the mouse. 2.If a bright light glows down onto your desk from an LED.	The mouse is optical	Manual
TC_02	Check left-click and right-click buttons	Verify that left-click and right-click buttons are working fine	Need a mouse connected to the computer.	A	1.Right click on any folder if the options came then it is working. 2.Left click on any option if the action performed then it is working.	both right and left buttons working fine.	Manual
TC_03	Check the double click	Check that double click works or not.	Need a mouse connected to the computer.	A	1.Doble Left click on any folder if the folder opened then it is working.	Double click is working	manual
TC_04	Check if scroller is present	Check if scroller is present at the top or not	Need a mouse connected to the computer with a scroller.	B	1.Use the connected mouse with scroller . 2.Now scroll the scroller so the page moves up and down.	Scroller is working	Manual
TC_05	Check for mouse type	Check if the mouse is a wireless mouse or corded mouse	Need a mouse.	B	1.See the mouse ,if the mouse contains any cable then it is chorded.	Mouse is chorded.	manual

Q7) Write test cases/scenarios to verify the functionality of a printer?

Answer:

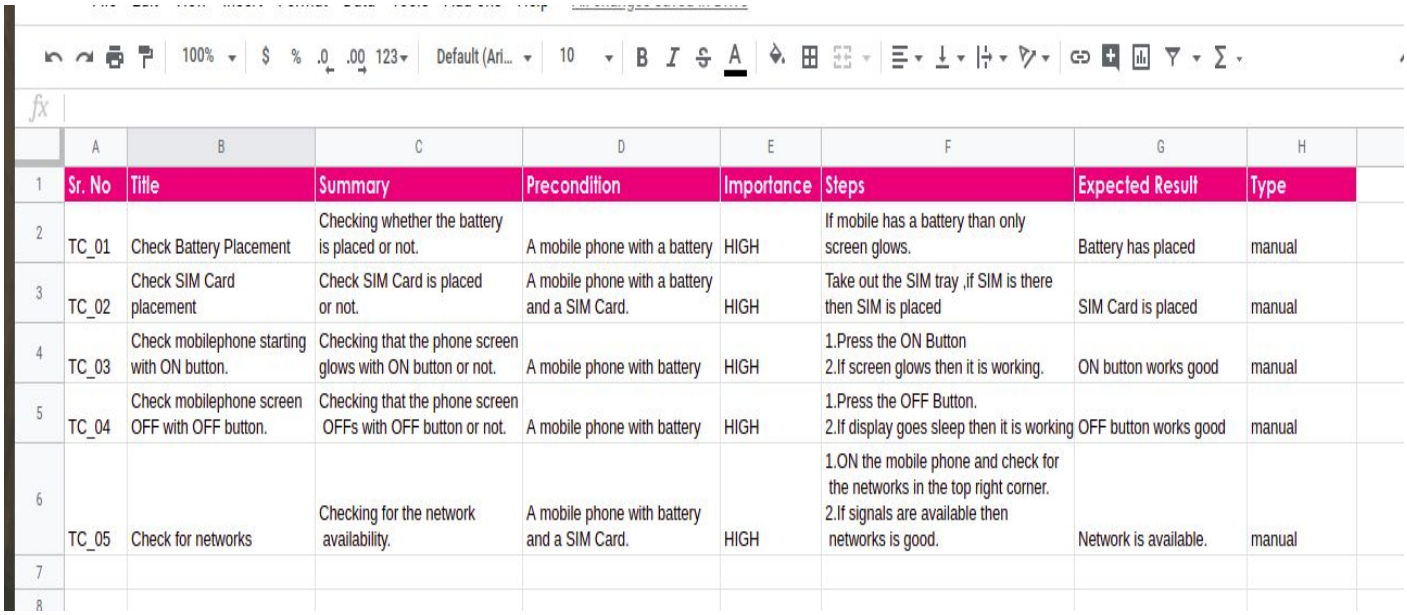
https://docs.google.com/spreadsheets/d/1s4RrLACmj7rdWlktWkc7oSy_Uoh4vWMJsnxkK9mTNJ8/edit?usp=sharing



Id	Title	Test Summary	Precondition	Importance	Steps to execute	Expected Result	Type
1	Check if printer has paper	Check if page has paper	1.Printer is plugged in. 2.Printer is connected to device	High	1.Open the document. 2.Print the page as per command. 3.Proceed to print if page is not empty	Page should print document as per screen.	manual
2	Check whether a page with various formats and alignment prints properly	Determine whether a page with various formats and alignment prints properly	1.Printer is plugged in. 2.Printer is connected to device.	Medium	1.Open the document. 2.Print the page as per command. 3.Ask user to check of alignment is as per the document	Page with various formats should be printed properly	manual
3	Check if printer ink.	Check if printer has enough ink	1.Printer is plugged in. 2.Printer is connected to device	Medium	1.Open the document. 2.Print the page as per command. 3.Ask user if any color is missing	Data color should print as per the document	manual
4	Determine if a page with indentations prints as seen on screen	Determine if a page with indentations prints as seen on screen	1.Printer is plugged in. 2.Printer is connected to device	Medium	1.Open the document. 2.Print the page as per command. 3.Ask user if page is printed with correct indentations	Indentations should be printed as seen on screen	manual
5	Determine if a page with portrait and Landscape settings prints properly	Determine if a page with portrait and Landscape settings prints properly	1.Printer is plugged in. 2.Printer is connected to device	High	Print a page with portrait and a page with landscape settings	Pages with portrait and landscape settings should be printed properly	manual

Q8) Write down test case/scenarios to list down possible steps to test a smart phone.

Answer:https://docs.google.com/spreadsheets/d/1___TrJnIhsz8mB9G1MgRFrt7wWkmNMXUcFgOoGEEEDs/edit?usp=sharing



Sr. No	Title	Summary	Precondition	Importance	Steps	Expected Result	Type
TC_01	Check Battery Placement	Checking whether the battery is placed or not.	A mobile phone with a battery	HIGH	If mobile has a battery than only screen glows.	Battery has placed	manual
TC_02	Check SIM Card placement	Check SIM Card is placed or not.	A mobile phone with a battery and a SIM Card.	HIGH	Take out the SIM tray ,if SIM is there then SIM is placed	SIM Card is placed	manual
TC_03	Check mobilephone starting with ON button.	Checking that the phone screen glows with ON button or not.	A mobile phone with battery	HIGH	1.Press the ON Button 2.If screen glows then it is working.	ON button works good	manual
TC_04	Check mobilephone screen OFF with OFF button.	Checking that the phone screen OFFs with OFF button or not.	A mobile phone with battery	HIGH	1.Press the OFF Button. 2.If display goes sleep then it is working	OFF button works good	manual
TC_05	Check for networks	Checking for the network availability.	A mobile phone with battery and a SIM Card.	HIGH	1.ON the mobile phone and check for the networks in the top right corner. 2.If signals are available then networks is good.	Network is available.	manual

Q9) There is a text box which accepts numbers from 1-10. List down the test data which needs to be tested for Boundary value analysis.

Answer:

The test data includes:

Boundary: (1,10)

So, any number 1<=number<=10 which lies in the boundary are valid else number is invalid.

For Boundary Value Analysis:

We check all the boundary values:

1. If the number is 0 then the result must be invalid.
2. If the number is 1 then the result must be valid.
3. If the number is 10 then the result must be valid.
4. If the number is 11 then the result must be invalid.

Q10) Suppose you have a bank account that offers variable interest rates:

5% for the first $1000 credit;

10% for the next $1000;

And 15% for the rest.

If you wanted to check that the bank was handling your account correctly what valid input partitions might you use?

Answer:

Class -I : if balance equal or below $1000=> 5%
i.e($1-$1000)
Class-II : if balance $1001-$2000 =>10%
i.e($1001-$2000)
Class-III: if balance above $2001 =>15%
i.e.($2001-above)

Q11) A mail order company charges $2.95 postage for deliveries if the package weighs less than 2 kg, $3.95 if the package weighs 2 kg or more but less than 5 kg, and $5 for packages weighing 5 kg or more.

Generate a set of valid test cases using equivalence partitioning.

Answer:

Class I: If weight of the package less than 2kg => $2.95

Class II: If weight >=2kg and weight<=5kg than => $3.95

Class III:If weight of package is above 5kg => $5

Q12) Boiling point of water is at 100 degrees Celsius. Determine the boundary values.

Answer:

The boundary is at 100 degrees Celsius, so for the 3 Value Boundary approach the boundary values will be 99 degrees, 100 degrees, 101 degrees.For the 2 value approach the corresponding values would be 100 and 101.

Q13) Exam pass – for 40 marks; merit at 60 and above; and distinction at 80 and above.

Determine the boundary values

Answer:

passing marks=40,

Merit marks=60,

Distinction marks=80.

Now the boundaries are:39,40,59,60,79,80.

Q14) Order numbers on a stock control system can range between 10000 and 99999 inclusive. Which of the following inputs might be a result of designing tests for only valid equivalence classes and valid boundaries:

a) 1000, 5000, 99999

b) 9999, 50000, 100000

c) 10000, 50000, 99999

d) 10000, 99999

e) 9999, 10000, 50000, 99999, 100000

Answer:

In this question, it is requested to design test cases only for valid equivalence classes and valid boundaries, meaning that all the answers that include values outside the range 10000 and 99999 are incorrect.So,

The valid boundaries are: [10000 and 99999] and there is only one equivalence class. So any middle number can be selected for a test case, in the given example it is 50000.

Hence, 10000,50000,99999 are the order numbers which come in valid equivalence class and valid boundary.

Q15) A program validates a numeric field as follows:

Values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected. Which of the following input values cover all of the equivalence partitions?

a. 10,11,21

b. 3,20,21

c. 3,10,22

d. 10,21,22

Answer:

Class I: values <= 9 => invalid class

Class II: 10 to 21 => valid class

Class III: values >= 22 => invalid class

Here the option **C (3,10,22)** is correct because:

3 belongs to values less than 10 -class-I(rejected) .

10 belongs to value between 10 to 21 -class-II(valid/accepted).

22 belongs to value more than or equals to 22 -class-III(rejected).

Q16) Which test cases are written first: white boxes or black boxes?

Answer:

Black Box Testing is usually performed first and after this testing we can perform white box testing.

Q17) Can you explain requirement traceability and its importance?

Answer:

The **Requirements Traceability Matrix** (RTM) is a document that links requirements throughout the validation process.

The purpose of the Requirements Traceability Matrix is to ensure that all requirements defined for a system are tested. Defect Leakages are prevented as a whole of the application is tested for its requirements.