To perform the activity, you need to use the **Activity4.1.txt** file.

To achieve the preceding requirements, Peter needs to perform the following steps:

1. Ensure that the **HangmanGame** Java application is open and active.
2. Create a new exception class named **WrongInputException** in the **game** package.
3. Replace the code in the **WrongInputException** file with the following code:

package game;

public class WrongInputException extends RuntimeException

{

WrongInputException()

{

System.out.println("Please provide a single character only..!!");

}

}

1. Create a new exception class named **MenuInputException** in the **game** package.
2. Replace the code in the **MenuInputException** file with the following code:

package game;

public class MenuInputException extends RuntimeException

{

MenuInputException()

{

System.out.println("Please provide a valid input (1-3)");

}

}

1. Open the **Activity4.1.txt** file.
2. Open the **Hangman.java** file.
3. Replace the code in the **Hangman.java** file with the code in the **Activity4.1.txt** file.
4. Replace the statements after the comment, // try-catch block, within the showMenu() method with the following statements:

option=0;

try

{

option = sc.nextInt();

}

catch(RuntimeException e)

{

System.out.println("Please provide a valid numeric input");

showMenu();

}

// Switch Case

switch(option)

{

case 1: playGame();

break;

case 2: instructGame();

break;

case 3: System.exit(0);

break;

default:

try

{

throw new MenuInputException();

}

catch (Exception e)

{

showMenu();

}

}

1. Replace the statements after the comment, //Implement user definedexception, within the playGame() method with the following code snippet:

try

{

String ch = input.nextLine().toLowerCase();

if(ch.length()!=1)

{

throw new WrongInputException();

}

count++;

for (i = 0; i < len; i++)

{

if (word[rnd].charAt(i) == ch.charAt(0))

{

newString[i] = word[rnd].charAt(i);

flag = 1;

}

}

if (flag == 0)

{

flag=1;

wrgString.append(ch + ",");

System.out.println("\nMisses: " + wrgString);

}

System.out.println(newString);

temp = new String(newString);

if (word[rnd].equals(temp))

{

System.out.println("---------- Congrats :) You won ------------");

System.out.println("Do you want to play again (Y/N)");

choice = input.nextLine();

if (choice.equalsIgnoreCase("y"))

{

playGame();

}

else

{

showMenu();

}

}

}

catch (WrongInputException e)

{

//System.out.println(e);

flag = 1;

}

}

while(flag!=0);

1. Compile and execute the **HangmanGame** Java application.