24/09/25

Task 9: implement Exceptions and Exceptional handling in python

9a: Student marks validation

Aim: The python program that accepts marks from the user and raises an exception if the entered marks are negative or greater than 100

Algorithm:

1. Start the program
2. Accept marks from the user using the input() function
3. convert the entered value to an integer or float
4. Use a try-Except block to handle invalid input
5. If marks < 0 or marks > 100
6. Inside the Except block
   - Display an appropriate error message to the user
7. End the program

Program:

```
try:
    marks = float(input("Enter student marks (0-100):"))
if marks<0 or marks>100:
    raise ValueError("mark must be between 0 and 100:")
print(f"valid marks Entered :{marks}")
    Except value error as e:
    print("Error:",e)
```

Result:

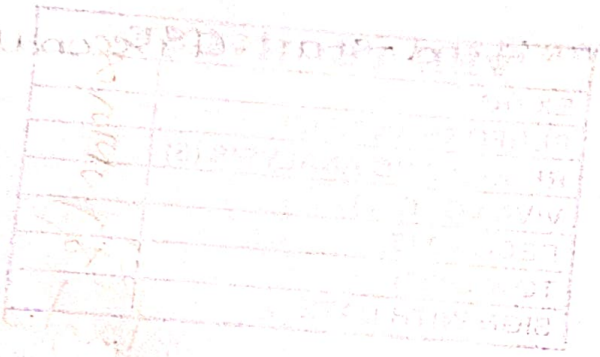
Thus the implement Exceptions and Exceptional handling in python Executed successfully.

Output:-

Valid input

Enter Student marks (0-100) :85

Valid marks entered :85.0



Output :-

```
Valid division
Enter the numerator : 10
Enter the denominator : 2
Result : 10 / 2 = 5.0
program Executed Successfully.
```

24-09-25

9b: Division calculator with expression handling

Aim: The python program that accepts two numbers from the users and performs division.

Algorithm:

1. Start the program
2. use a try block to:
   - Accept two numbers
   - convert them to float
3. if the denominator is zero
4. if the input is not numeric, a value error occurs.
5. if no exceptions occur, display the result

program:

```
try
  num1=float(input("enter the numerator:"))
  num2=float(input("enter the denominator:"))
  result=num1/num2
  print(f"Result:{num1}/{num2}={result}")
except zeroDivisionError:
  print("ERROR:Division by zero is not allowed")
except valueerror:
    print("error:please enter valid numeric values")
finally
  print("program Execution Completed")
```

VEL TECH - CSE	
EX NO.	9
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	
TOTAL (20)	15
SIGN WITH DATE	

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Result: Thus the Division calculator with expression handling program Executed successfully.

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