

PYTHON LAB – 11

EXCEPTION

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QUESTIONS

1. Write a Python program to handle a `ZeroDivisionError` exception when dividing a number by zero.
2. Write a Python program that prompts the user to input an integer and raises a `ValueError` exception if the input is not a valid integer.
3. Write a Python program that opens a file and handles a `FileNotFoundError` exception if the file does not exist.
4. Write a Python program that prompts the user to input two numbers and raises a `TypeError` exception if the inputs are not numeric

1. Write a Python program to handle a ZeroDivisionError exception when dividing a number by zero.

```
a = int(input("Enter a number1 : ")) #taking user input
b = int(input("Enter a number2 : ")) #taking user input
try: #entering try block
    res = a/b #dividing a by b and storing result in res
    print(f"Division of {a} from {b} is {res}") #printing
statement
except ZeroDivisionError: #handling zerodivisionerror
    print("Division by 0 not possible")
```

OUTPUT:

CASE 1:

Enter a number1 : 5

Enter a number2 : 2

Division of 5 from 2 is 2.5

CASE 2:

Enter a number1 : 10

Enter a number2 : 0

Division by 0 not possible

2. Write a Python program that prompts the user to input an integer and raises a ValueError exception if the input is not a valid integer.

```
def div():  
    try:  
        a = int(input("Enter a number1 : ")) #taking user  
input  
        b = int(input("Enter a number2 : ")) #taking user  
input  
  
        if b==0: #checking if denominator is zero  
            raise ValueError("Zero Division Error") #if  
condition is true raise value error  
        else: #if condition is false enters else block  
            res = a/b #Divide a by b and stores result in res  
            print("Final result is:", res) #prints result  
    except ValueError as e: #Handling error  
        print("Final result is : ",e)  
div()
```

OUTPUT:

CASE 1:

Enter a number1 : 68

Enter a number2 : 4

Final result is: 17.0

CASE 2:

Enter a number1 : 5

Enter a number2 : 0

Final result is : Zero Division Error

3. Write a Python program that opens a file and handles a `FileNotFoundError` exception if the file does not exist.

```
try:
    file_location = input("Enter your file name : ") #taking
    file_name
    with open(file_location) as file: #opening file
        file.read() #reading file
        print(f"The file {file_location} found successfully.")
#printing statement
except FileNotFoundError: #handling exception
    print(f"The file {file_location} not found." ) #printing
statement
```

OUTPUT:

CASE 1:

Enter your file name : /content/DANLC/demo

The file /content/DANLC/demo found successfully.

CASE 2:

Enter your file name : python

The file python not found.

4. Write a Python program that prompts the user to input two numbers and raises a TypeError exception if the inputs are not numeric

```
try:
    Num1 = int(input("Enter a number : ")) #Takes user
input
    Num2 = int(input("Enter a number : ")) #Takes user
input
    print("Number 1 is : ",Num1) #print Number 1
    print("Number 2 is : ",Num2) #print Number 2

except ValueError: #handling error
    print("Input should be in integer")
```

OUTPUT:

CASE 1 :

Enter a number : keer

Input should be in integer

CASE 2 :

Enter a number : 1234

Enter another number : type

Input should be in integer

CASE 3 :

Enter a number : 1234

Enter another number : 7890

Number 1 is : 1234

Number 2 is : 7890