



(<https://www.darshan.ac.in/>)

Python Programming - 2101CS405

Lab - 9

Exception Handling

A

01) WAP to handle divide by zero exception.

```
In [5]: a = int(input("Enter A:"))
b = int(input("Enter B:"))
try:
    print(f"Ans:{a/b}")
except ZeroDivisionError as e:
    print("Sencond Value must not be 0")
```

```
Enter A:5
Enter B:0
Sencond Value must not be 0
```

02) Write a Python program that inputs a number and generates an error message if it is not a number.

```
In [12]: try:
a = int(input("Enter NO:"))
except ValueError as e:
    print("Required Int but Found it is not")
```

```
Enter NO:56kl
Required Int but Found it is not
```

03) WAP to handle file not found Exception

```
In [22]: file = input("Enter File Name:")
try:
    f = open(file,"r")
    print("File Found")
except FileNotFoundError as e:
    print("File not Found")
```

Enter File Name:10.png
File Found

In []:

04) WAP to handle type Exception.

```
In [28]: a = (input("Enter No:"))
try:
    ans = a+9
except TypeError as e:
    print("Invalid Datatype")
```

Enter No:5
Invalid Datatype

05) WAP to demonstrate valueError and indexError with example.

```
In [31]: l1 = [1,2,3,4,"abc"]
try:
    int(input("Enter No:"))
    l1[5]
except IndexError as e:
    print("IndexError")
except ValueError as e:
    print("ValueError")
```

Enter No:5
IndexError

06) WAP to demonstrate else and finally block.

```
In [33]: a = int(input("Enter A:"))
b = int(input("Enter b:"))
try:
    ans = a/b
except ZeroDivisionError as e:
    print("Second value must not be Zero")
else:
    print(f"Ans:{ans}")
finally:
    print("Program Executed Successfully")
```

```
Enter A:5
Enter b:0
Second value must not be Zero
Program Executed Successfully
```

07) Create a short program that prompts the user for a list of grades separated by commas. Split the string into individual grades and use a list comprehension to convert each string to an integer. You should use a try statement to inform the user when the values they entered cannot be converted.

```
In [36]: l2 = input("Enter 5 Marks Of Subjects by Comma:").split(",")
try:
    l3 = [int(x) for x in l2 ]
except:
    print("String can't converted in int")
else:
    print(l3)
```

```
Enter 5 Marks Of Subjects by Comma:abc,jk,89,75,90
String can't converted in int
```

Type *Markdown* and LaTeX: α^2

B

01) WAP to Raising User Generated Exception.

In [40]:

```
try:
    raise ZeroDivisionError
except:
    print("Can't devide by ZERO")
```

Can't devide by ZERO

02) WAP to raise your custom Exception.

In [43]:

```
class NegativeNumberException(Exception):
    pass
try:
    n = int(input("Enter ur age:"))
    if n>0:
        print(n)
    else:
        raise NegativeNumberException
except NegativeNumberException:
    print("Custom Error")
```

Enter ur age:4

4

In []: