

Task – 14

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# task - 14

# 1. List down all the error types and check all the errors using a python program for all errors

IndexError:-
>>> L1=[1,2,3]
>>> L1[3]
Traceback (most recent call last):
File "<pyshell#18>", line 1, in <module>

L1[3]
IndexError: list index out of range

ModuleNotFoundError:-
>>> import notamodule
Traceback (most recent call last):
File "<pyshell#10>", line 1, in <module>

import notamodule
ModuleNotFoundError: No module named 'notamodule'

KeyError:-
>>> D1={'1':"aa", '2':"bb", '3':"cc"}
>>> D1['4']
Traceback (most recent call last):
File "<pyshell#15>", line 1, in <module>

D1['4']
KeyError: '4'

ImportError:-
>>> from math import cube
Traceback (most recent call last):
File "<pyshell#16>", line 1, in <module>

from math import cube
ImportError: cannot import name 'cube'

StopIteration:-
>>> it=iter([1,2,3])
>>> next(it)
1
```

```

>>> next(it)
2
>>> next(it)
3
>>> next(it)
Traceback (most recent call last):
File "<pyshell#23>", line 1, in <module>

next(it)
StopIteration

TypeError:-
>>> '2'+2
Traceback (most recent call last):
File "<pyshell#23>", line 1, in <module>

'2'+2
TypeError: must be str, not int

ValueError:-
>>> int('xyz')
Traceback (most recent call last):
File "<pyshell#14>", line 1, in <module>
int('xyz')
ValueError: invalid literal for int() with base 10: 'xyz'

NameError:-
>>> age
Traceback (most recent call last):
File "<pyshell#6>", line 1, in <module>

age
NameError: name 'age' is not defined

ZeroDivisionError:-
>>> x=100/0
Traceback (most recent call last):
File "<pyshell#8>", line 1, in <module>
x=100/0
ZeroDivisionError: division by zero

KeyboardInterrupt:-
>>> name=input('enter your name')
enter your name^c
Traceback (most recent call last):
File "<pyshell#9>", line 1, in <module>
name=input('enter your name')
KeyboardInterrupt

```

2. Design a simple calculator app with try and except for all use cases

```
print("Math Operations")
print("1.Addition\n" "2.Sutraction\n" "3.Multiplication\n" "4.Division\n")

while True:
    try:
        num1 = float(input('Enter First number: '))
        break
    except ValueError:
        print('Error! Please enter a valid number.')
op = int(input("Enter Operation No.: "))
while True:
    try:
        num2 = float(input('Enter Second number: '))
        break
    except ValueError:
        print('Error! Please enter a valid number.')
if op == 1:
    print(num1 + num2)
elif op == 2:
    print(num1 - num2)
elif op == 3:
    print(num1 * num2)
elif op == 4:
    print(num1 / num2)
else:
    print("Not a valid math problem!")
```

output :-

```
Math Operations
1.Addition
2.Sutraction
3.Multiplication
4.Division

Enter First number: 41
Enter Operation No.: 1
Enter Second number: abc
Error! Please enter a valid number.
Enter Second number: 5
46.0
```

3. print one message if the try block raises a NameError and another for other errors

```
try:
    print(x)
except NameError:
```

```
print("Variable x is not defined")
except:
    print("Something else went wrong")
```

output :-

```
Variable x is not defined
```

5. Try getting an input inside the try catch block

```
try:
    x=int(input('Enter a number upto 10: '))
    if x > 10:
        raise ValueError(x)
except ValueError:
    print(x, "is out of allowed range")
else:
    print(x, "is within the allowed range")
```

output :-

```
Enter a number upto 10: 15
```

```
15 is out of allowed range
```

```
Enter a number upto 10: 6
```

```
6 is within the allowed range
```