

\* lab-13 \*

(1) write to implement a calculator that perform basic operation handle exception like division by zero, invalid operation input etc.

```
n1 = int(input(" enter a: "))  
n2 = int(input(" enter b: "))  
op = input(" enter operation ")
```

try:

```
if op == "+":
```

```
res = n1 + n2
```

```
elif op == "-":
```

```
res = n1 - n2
```

```
elif op == "*":
```

```
res = n1 * n2
```

```
elif op == "/":
```

```
res = n1 / n2
```

```
else:
```

```
raise ValueError ("invalid operation")
```

```
print("result", res)
```

except ZeroDivisionError as z:

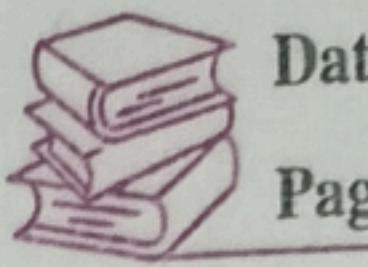
```
print(z)
```

except ValueError as v:

```
print(v)
```

except Exception as e:

```
print(e)
```



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output: enter a : 2  
enter b : 2 (b) twice  
enter operation: #  
invalid operation: +

(2) write a program to check whether a person is eligible to donate blood take age and weight from the user. blood donation criteria are age should be 18 or greater than 18 and weight should be greater than 50 kg raise value error exception for invalid input. and create a custom exception if the above-mentioned criteria don't match.

class IneligibleForDonation(Exception):

def \_\_init\_\_(self, msg):

self.message = msg

age = int(input("enter age:"))

weight = int(input("enter weight:"))

try:

if age < 18 or weight <= 50:

raise IneligibleForDonation("you are not eligible for donation")

else:

print("you are eligible for donation")



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except ineligible for donation as if  
print(iFd)

output: enter age: 19  
enter weight: 55

you are eligible for donation.

(3) write a program to divides two number and raises a custom exception if the user tries to divide by zero.

class DivisionError(Exception):

```
def __init__(self, msg):  
    self.message = msg
```

```
n1 = int(input("enter a:"))
```

```
n2 = int(input("enter b:"))
```

try:

```
if n2 == 0:
```

```
raise DivisionError("the number is  
divide by zero")
```

else:

```
print(n1/n2)
```

except DivisionError as de:

```
print(de)
```

output: enter a: 3

enter b: 0

the number is not divide by zero.

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