Conditonal

February 26, 2025

[2]:
```
s = input("Enter a string: ")
if not s:
 print("String is empty")
else:
 print("String is not empty")
```

```
Enter a string:  hello
```

```
String is not empty
```

[ ]:
```

```

[6]:
```
num = int(input("Enter a number: "))
if math.isqrt(num) ** 2 == num:
 print("Perfect Square")
else:
 print("Not a perfect square")
```

```
Enter a number:  64
```

```
Perfect Square
```

[10]:
```
day = input("Enter Any Day").lower()
if day in ['saturday','sunday']:
    print('Weekend')
else:
    print('WeekDay')
```

```
Enter Any Day monday
```

```
WeekDay
```

[13]:
```
s1 = int(input('Enter side one'))
s2 = int(input('Enter side two'))
s3 = int(input('Enter side three'))
if s1+s2>s3 and s2+s3>s1 and s3+s1>s2:
    print('its a Triangle')
else:
    print('Not a triangle')
```

```
Enter side one 3
Enter side two 3
Enter side three 6
```

```
Not a triangle
```

[17]:
```
s1 = int(input('Enterside one'))
s2 = int(input('Enter side two'))
s3 = int(input('Enter side three'))
if s1>=s2 and s1>=s3:
    print('s1 is greater')
elif s2>=s3:
    print('S2 is greater')
else:
    print('S3 is greater')
```

```
Enterside one 10
Enter side two 4
Enter side three 5
```

```
s1 is greater
```

[1]:
```
p = int(input('Enter a number'))
for i in range(1,p):
    if i%p ==0:
        print('Not a prime number')
        break

else:
    print('Prime Number')
```

```
Enter a number 5
```

```
Prime Number
```

[3]:
```
age = int(input("Enter age: "))
passed_test = input("Did you pass the driving test? (yes/no): ").lower()
if age >= 18 and passed_test == "yes":
 print("Eligible for a driving license")
else:
 print("Not eligible")
```

```
Enter Age 18
```

```
Valid for Driving
```

[4]:
```
a = int(input("Enter first side: "))
b = int(input("Enter second side: "))
c = int(input("Enter third side: "))
if a == b == c:
```

```
 print("Equilateral Triangle")
elif a == b or b == c or a == c:
 print("Isosceles Triangle")
else:
 print("Scalene Triangle")
```

```
Enter first side:  5
Enter second side:  10
Enter third side:  6
```

```
Scalene Triangle
```

[7]:
```
marks = int(input('Enter Marks'))
if marks >= 40:
    print('Pass')
else:
    print('Fail')
```

```
Enter Marks 45
```

```
Pass
```

[20]:
```
#Palindrome
name = input('Enter any Name')
if name[::-1]== name:
    print('Its Palindrome')
else:
    print('Its Not')
```

```
Enter any Name hellow
```

```
Its Not
```

[27]:
```
bill = int(input('Enter Your Units'))
if bill<=100:
    print('Your bill is ',bill*5)
elif 300>=bill>100:
    Bill= (5*100)+(bill-100)*10
    print('Your bill is',Bill)
else:
    Bill= (5*100)+(bill-100)*10+(bill-300)*15
    print('Your bill is',Bill)
```

```
Enter Your Units 200
```

```
Your bill is 1500
```

[28]:
```
units = int(input("Enter electricity units consumed: "))
if units <= 100:
 bill = units * 5
elif units <= 300:
```

```
 bill = (100 * 5) + (units - 100) * 10
else:
 bill = (100 * 5) + (200 * 10) + (units - 300) * 15
print("Total Bill:  ", bill)
```

```
Enter electricity units consumed:  200

Total Bill:  1500
```

[30]:
```
import calendar
day = int(input("Enter day: "))
month = int(input("Enter month: "))
year = int(input("Enter year: "))
if 1 <= month <= 12 and 1 <= day <= calendar.monthrange(year, month)[1]:
 print("Valid date")
else:
 print("Invalid date")
```

```
Enter day:  29
Enter month:  02
Enter year:  2025

Invalid date
```

[33]:
```
num = input("Enter a number: ")
power = len(num)
if sum(int(digit) ** power for digit in num) == int(num):
 print("Armstrong Number")
else:
 print("Not an Armstrong Number")
```

```
Enter a number:  49

Not an Armstrong Number
```

[39]:
```
Amount = int(input('Enter amount for withdrawl'))
Balance= 5000
if Balance>=Amount:
    print('Take Cash')
    Balance = Balance - Amount
    print('Remaining Balance is',Balance)
else:
    print('Insuffucient Fund')
```

```
Enter amount for withdrawl 2512

Take Cash
Remaining Balance is 2488
```

[43]:
```
import re
password = input("Enter password: ")
```

```
if len(password) >= 8 and re.search(r"[A-Za-z]", password) and re.search(r"\d",␣
 ↪password):
 print("Valid Password")
else:
 print("Invalid Password")
```

```
Enter password:  Chandu007

Valid Password
```

[49]:
```
age = int(input('enter your age'))
price = 100
if age<=5:
    print('Free entry')
elif age>=60:
    print('50% discount for You PAy Rs -  ',price/2)
else:
    print('Pay Rs - ',price)
```

```
enter your age 50

Pay Rs -  100
```

0.1 Level 2

[2]:
```
#Assert Function

x = int(input('Enter any value'))
assert x >0 ,'Value should be greater than 0 '
print(x)
```

```
Enter any value 5

5
```

[10]:
```
#try-except-else-finally
def divide(a,b):
    try:
        result = a/b
    except ZeroDivisionError :
        print('Cannot divide with zero')
    else:
        print('Result:', result)
    finally:
        print(" Final block is here")

divide(55,5)
divide(50,0)
```

```
Result: 11.0
 Final block is here
```

```
Cannot divide with zero
 Final block is here
```

[13]:
```python
#In-Notin Uses
f= input('Enter any fruit')
fruits = ['apple','banana','peach']
if f in fruits:
    print('{} is in fruits'.format(f))
else:
    print('{} Not in Fruits'.format(f))
```

```
Enter any fruit orange
```

```
orange Not in Fruits
```

[24]:
```python
#Break-Continue
l = []
for i in range(10):
    if i == 3:
        print('It will skip ',i)
        continue
    elif i == 7:
        print('I is at',i,'It will break the loop')
        break
    else:
        l.append(i)
print(l)
```

```
It will skip  3
I is at 7 It will break the loop
[0, 1, 2, 4, 5, 6]
```

[28]:
```python
def positive(x):
    return x>0
def even(x):
    return x%2 == 0
result = positive(-5) and even(4)
print(result)
result_or =  positive(5) or even(6)
print(result_or)
```

```
False
True
```

[29]:
```python
#if expression -PEP308
x = 10
message = "x is greater" if x>5 else 'X is smaller'
print(message)
```

```
x is greater
```

[ ]: