Shorthand Notation Of if else

In [ ]:
```
marks = int(input("Enter marks: "))
if marks > 40: print("Passed")
else : print("Failed")
```

```
Enter marks: 45
Passed
```

In [ ]:
```
# Nested if
marks = int(input('Enter marks: '))
if marks > 0 and marks <= 100:
  if marks > 90: print('A')
  elif marks > 80: print("B")
else :print("invalid input")
```

```
Enter marks: 68
```

In [ ]:
```
## ladder if : we use ladder if where , there is a possibility that multiple condition
## nested if :m for single condition is true
```

In [ ]:
```
# String formatiing
#- Using % Operator
#- Using format method
#- Using f-string
```

In [ ]:
```
x = 5
y = 2
print('The sum of',x, 'and',y ,'is', x +y)
```

```
The sum of 5 and 2 is 7
```

In [ ]:
```
# Format specifires
# %s = string
# %d %i = integer
# %f = float
```

Using % operator

In [ ]:
```
print("The sum of %s and %s is %s" %(x,y,x+y))

# based on the positional order
#1st %s = x
#2nd %s = y
#3rd %s = x+y
```

```
The sum of 5 and 2 is 7
```

In [ ]:
```
print("The sum of %d and %d is %d" %(5.4,y,x+y))

# here we have given format operator as %d ,
# so that will take integers ,
# lets try by giving float value
```

```
# in output you can observe that even if we given float value to it and
# give format operator as %d (for integr) , it converted that float value into int dat
```

```
The sum of 5 and 2 is 7
```

In [ ]:
```
print("The sum of %f and %d is %s" %(x,y,x+y))

# here as we given integer value to it and formating operator is used  as float
# hence it is making integer to float
```

```
The sum of 5.000000 and 2 is 7
```

In [ ]:
```
print("The sum of %.2f and %d is %d" %(x,y,x+y))

# .2 specifies that you are fixing value of float to two decimal
```

```
The sum of 5.00 and 2 is 7
```

Using Format Method

In [ ]:
```
print("The sum of {} and {} is {}" .format(x,y,x+y))
```

```
The sum of 5 and 2 is 7
```

In [ ]:
```
print("The sum of {1} and {0} is {2}" .format(x,y,x+y))


# here you can give the position number inside the braces
# that is you can control the positional order by giving index no in braces
# (x, y, x+y)
# (0, 1,  2)

# you can compare the output of previous cell and this cell
```

```
The sum of 2 and 5 is 7
```

In [ ]:
```
print("The sum of {2} and {0} is {1}" .format(x,y,x+y))
```

```
The sum of 7 and 5 is 2
```

In [ ]:
```
print("The sum of {} and {} is {}{}{}{}" .format(x,y,"A",'B','C',x+y))
```

```
The sum of 5 and 2 is ABC7
```

Note : Whether you are using %d/%f/%s . they are not impacting the calculation is going to done here at all in any ways

they are just format specifires , they are specifying the format in which the data has to be printed ; They are not controlling the data . they are just change the type of data which is printing

Using f- string

In [ ]:
```
x = 5
y = 2
```

```
print('The sum of {x} and {y} is {x +y}')
```

```
The sum of {x} and {y} is {x +y}
```

In [ ]:
```
x = 5
y = 2
print(f'The sum of {x} and {y} is {x +y}')
```

```
The sum of 5 and 2 is 7
```

In [ ]:
```
x = 5
y = 2
print(f'The sum of {x} and {y} is %f'%(x+y))
# here both are used
```

```
The sum of 5 and 2 is 7.000000
```

In [ ]:
```
x = 5
y = 2
print(f'The sum of {x} and {y} is %.2f'%(x+y))
```

```
The sum of 5 and 2 is 7.00
```

In [ ]:
```
a = int(input('Enter a: '))
b = int(input('Enter b: '))
print(f'The sum of {a} and {b} is {a+b}')
```

```
Enter a: 2
Enter b: 3
The sum of 2 and 3 is 5
```

In [ ]:
```

```