Print (5)

03-04-2025

1) A school needs to check if a student passes or failed. if marks greater than 50 then he passes

A)

```
s= 95
if s>=50:
    print("The student passed in exam")
else:
    print("The student failed in exam")
```

2) write a python program to swap the value of two variable in two methods

1)

```
a=2
b=3
a,b = b,a
print(a,b)
```

```
a=2
b=3
a=a+b
b=a-b
a=a-b
print(a,b)
```

```
a=2
b=3
t=b
b=a
a=t
print(a,b)
```

3) write a python program to create a simple Calculator by using functions.

4) def add(a,b):
    return a+b
def sub(a,b):
    return a-b
def Mul(a,b):
    return a*b
def div(a,b)
    return a/b

a = 2
b = 3
choice = +
if choice == '+':
    c = add(a,b)
    print(c)
elif choice == '-':
    c = sub(a,b)
    print(c)
elif choice == '*':
    c = Mul(a,b)
    print(c)
elif choice == '/':
    c = div(a,b)
    print(c)
else:
    print("Invalid operator")

5) write a python program using expressions (enchan variables, circulate the values of n variable and distance b/w two points).

4) a = 2
b = 3
a, b = b, a
print (a, b)

* a, b, c = 1, 2, 3
a, b, c = c, a, b
print (a, b, c)

* x1, y1 = 0, 0
x2, y2 = 3, 4
a = (x2 - x1) ** 2
b = (y2 - y1) ** 2
c = (a + b) ** 0.5
print (c)

5) write a program to perform n fibracci series

A)
```
f = 0
s = 1
n = 10
for i in range (n):
    print (f, end = ' ')
    n = f + s
    f = s
    s = n
```

6) Implementing programs using functions for factorial

A)
```
def fact (n):
    f = 1
    for i in range (1, n+1):
        f *= i
    return f
a = fact (n)
print (a)
```

7/ Solve the scientific problems using conditionals and iterative loops.

A/
```
Def patt(n):
    for i in range (1,n+1):
        for j in range (1,i+1):
            print ('*', end=' ')
        print ()
```

~~a= patt(5)~~
~~print~~
patt(5)

8/ Find the lcm and gcd of a given number

A/ L.C.M

```
a = 12
b= 18
lcm= max (12,18)
while True:
    if lcm%a==0 and lcm%b==0:
        break
    lcm+= 1
print(lcm)
```

G.C.D

```
a= 12
b= 18
while b!=0
    a,b = b,a%b
print(a)
```

9/ Implementing program using strings.

A/
```
S= "MADAM"
print (S[::-1])
```

```
S= "MADAM"
a= S.count ('A')
print (a)
```