

12th Sept



Date: _____

write a program to print both position and value

```
sub = 'python'
for i in range(0, 6, 1):
    print(i, sub[i])
```

Output :-

0	p
1	y
2	t
3	h
4	o
5	n

```
sub = 'python'
for i in range(5, -1, -1):
    print(i, sub[i])
```

Output :-

5	n
4	o
3	h
2	t
1	y
0	p



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Write a program to print even number from 1 to 20

```
for i in range(2, 21, 2):  
    print(i)
```

Output :

2

4

6

8

10

12

14

16

18

20

1 to 10

1 = odd number

2 = even number

3 = odd number

.

10 = even number

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```

for i in range(1, 11, 1):
    if (i % 2 == 0):
        print(i, "= Even number")
    else:
        print(i, "= odd number")
  
```

Output :

1	= odd number
2	= even number
3	= odd number
4	= even number
5	= odd number
6	= even number
7	= odd number
8	= even number
9	= odd number
10	= even number

write a program to print tables of a given number

Sample o/p

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

⋮

$$2 \times 10 = 20$$



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```
num = int(input("Enter a number:"))  
for i in range(1, 11, 1):  
    print(f"{num} x {i} = {num*i}")
```

Output :-

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

write a program to calculate sum of 1 to 10 numbers

```
num = int(input("enter a number:"))  
for i in range(1, 11, 1):  
    print(f"{num} + {i} = {num+i}")
```

enter a number: 1



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Output : $1 + 1 = 2$

$$1 + 2 = 3$$

$$1 + 3 = 4$$

$$1 + 4 = 5$$

$$1 + 5 = 6$$

$$1 + 6 = 7$$

$$1 + 7 = 8$$

$$1 + 8 = 9$$

$$1 + 9 = 10$$

$$1 + 10 = 11$$

$$s = 0$$

for i in range (1, 11, 1):

$$s = s + i$$

print(s)

Output :

1

3

6

10

15

21

28

36

45

55



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''' write program to count how many even numbers are there from 1 to 15 '''

```
Count = 0
for i in range(1, 16, 1):
    if (i % 2 == 0):
        print("i =", i)
        Count = Count + 1
print("Count =", Count)
```

Output :- i = 2

Count = 1

i = 4

Count = 2

i = 6

Count = 3

i = 8

Count = 4

i = 10

Count = 5

i = 12

Count = 6

i = 14

Count = 7



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Write a program for how many numbers, how many even numbers, how many odd numbers are there in given range.

```
sr = int(input())
```

```
er = int(input())
```

```
nc = 0
```

```
ec = 0
```

```
oc = 0
```

```
for i in range(sr, er + 1, 1):
```

```
    print("when i = ", i)
```

```
    nc = nc + 1
```

```
    print("nc = ", nc)
```

```
    if (i % 2 == 0):
```

```
        ec = ec + 1
```

```
        print("ec = ", ec)
```

```
    else:
```

```
        oc = oc + 1
```

```
        print("oc = ", oc)
```

Output :-

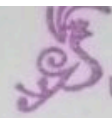
4

6

when i = 4

nc = 1

ec = 1



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when $i = 5$ $nc = 2$ $oc = 1$ when $i = 6$ $nc = 3$ $ec = 2$

''' write a program to calculate factorial of given number sample o/p

num = 5
fact = $5 * 4 * 3 * 2 * 1 = 120$ '''

```
num = int(input())
fact = 1
for i in range(5, 0, -1):
    fact = fact * i
print(fact)
```

Output :-

5	120
20	
60	
120	
120	