

23-09-2025

2)while loop:

syntax:

initialization of while loop

while(condition):

statements

inc/dec while loop

Q) WAP to print odd/ even number

A) x = 1

while(x<=10):

if(x%2==0):

print(x,"= even number")

else:

print(x,"= odd number")

x=x+1

o/p:

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

3)nested loop

* for loop inside for loop

* while loop inside while loop

* for loop inside while loop

* while loop inside for loop

Syntax:

```
for var_a in range(): #outer loop
    for var_b in range(): #inner loop
        statement of inner loop
    statement of outer loop
```

Q2) WAP to print tables from 1 to 10

```
A) for i in range(1,11,1):
    for j in range(1,11,1):
        print(i*j,end="\t")
    print()
```

o/p:

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100

Q3) WAP and your program should give this output

```
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5
```

```
A) for i in range(1,6,1):
    for j in range(1,6,1):
        print(i,end=" ")
    print()
```

o/p:

```
1 1 1 1 1
2 2 2 2 2
3 3 3 3 3
4 4 4 4 4
5 5 5 5 5
```

Q4) WAP to print

```
      2      4
    2  4  6  8  10
      6      12
    4  8  12  16  20
      10     20
```

```
A) for i in range(1,6,1):
    for j in range(1,6,1):
        if((i*j)%2==0):
            print(i*j,end="\t")
        else:
            print(" ",end="\t")
    print("\n")
```

o/p:

```
      2      4
    2  4  6  8  10
      6      12
    4  8  12  16  20
      10     20
```