1. Sum of even natural numbers upto ~~n~~ n terms.

→ Code:

```
n = int(input("Enter ~~an~~ ~~even~~ a number: "))
sum = 0
i = 1
while i <= n:
    if (i % 2 == 0):
        sum = sum + i
    i = i + 1
print("sum of even numbers:", sum)
```

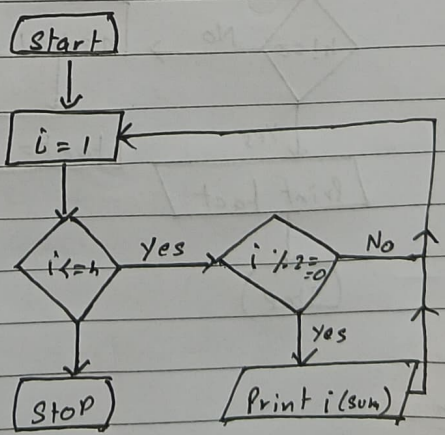
→ Output:

```
: 8
sum = 20
```

→ ~~Explanation~~ Explanation

n takes input from user, initialize sum = 0 & i = 1. Check ~~whether~~ if i is less than or equal to n, if i % 2 == 0 then print sum of even numbers.

→ Flowchart:



2. Factorial of a number.

→ Code:

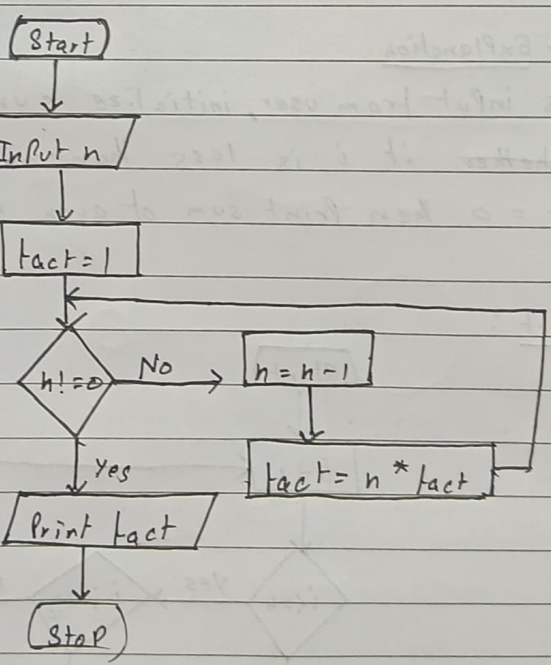
```
n= int(input("Enter a number:"))
fact = 1
num = n
while n != 0:
    fact = n * fact
    n = n-1
Print("Factorial of", num, "=", fact)
```

→ OutPut:

5

fact= 120

→ ~~Explanation~~ Flowchart:



→ Explanation:

n takes input from user, initialize fact=1 & num = n. While i is not equal to 0, fact = n * fact. Then Print factorial

8. Sum of digits of given number

→ code:

```
n = int (input ("Enter the number :"))
sum = 0
while n != 0:
    d = n % 10
    sum = sum + d
    n = n // 10
Print ("sum of digits is :" sum)
```

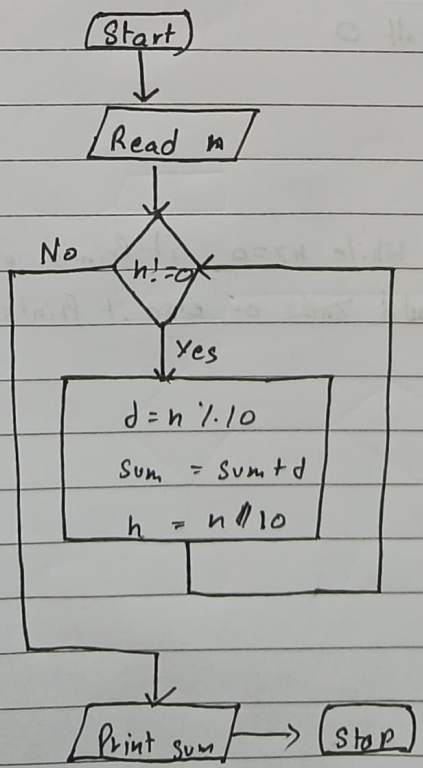
→ Outputs:

2048 → 14

→ Explanation:

n takes input from user. Initialize sum = 0. While n ≠ 0 it prints sum or else it goes back to while loop.

→ Flow chart:



3) Counts from 10 → 1 using for loop

Code:

```
n = 10
While n >=0:
    if n>0:
        if n % 2 == 0:
            Print("Even :", n), n = n-1
        else:
            Print("Odd :", n), n = n-1
    else:
        Print("Blast off")
```

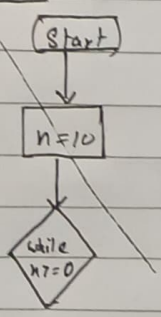
OutPut:

even	10	even	4
odd	9	odd	3
even	8	even	2
odd	7	odd	1
even	6	Blast off	0
odd	5		

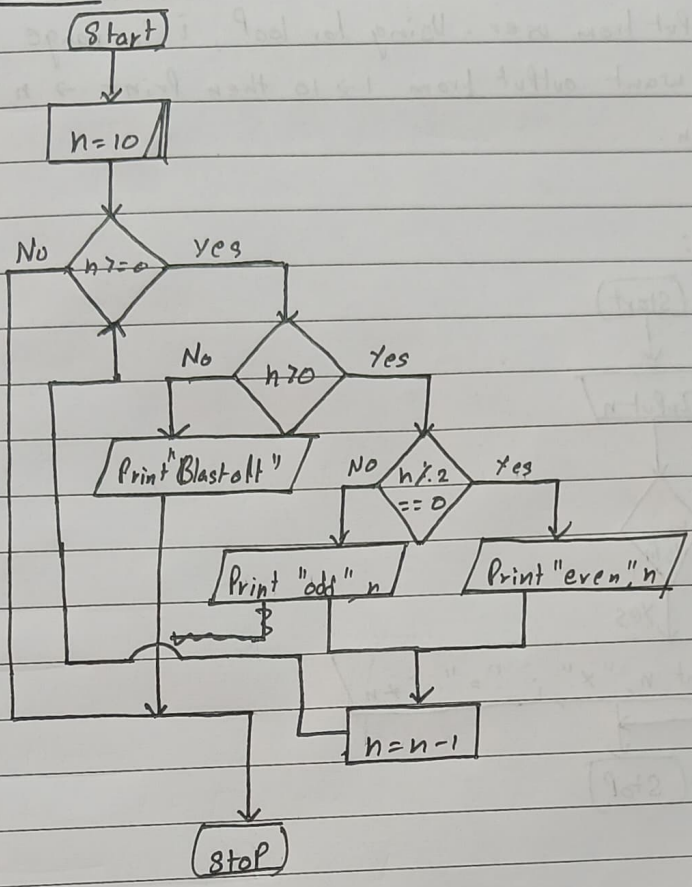
Explanation:

Initialize n = 10, While n>=0, it Prints even if n % 2 == 0 or else it Prints odd ~~and~~ or else it Prints blast off from 10 → 1

Flowchart:



Flowchart:



4) Multiplication table

Code:

```
n = int(input("Enter a number:"))
for i in range(1, 11):
    print(n, "*", i, "=", i*n)
```

-> Output:

```
2
2 x 1 = 2
2 x 2 = 4
2 x 3 = 6
  :
  :
  :
2 x 10 = 20
```

→ Explanation:

n takes input from user. Using for loop, i in range of 1→11 since we want output from 1→10 then print → n x 1 = n x i, and so on.

→ Explanation: