HW

1) Sum of digits of a number:-

```
num = 12345
sum = 0
while num > 0:
    sum += num % 10
    num //= 10
print("sum of digits:", sum)
```

2) Check if a string is a palindrome:-

```
S = "madam"
if S == S[::-1]:
    print(S, "is a palindrome")
else:
    print(S, "is not a palindrome")
```

3) Generate Fibonacci series upto n terms:-

```
n = 10
a, b = 0, 1
for i in range(n):
    print(a, end=" ")
    a, b = b, a + b
```

4) Count the occurences of a character in a string:-

```
S = "Hello world"
char = "l"
count = s.count(char)
print("The character", char, "occurs", count, "times")
```

5) Convert Celcius to Farenheit :-

```
celcius = 30
farenheit = (celcius * 9/5) + 32
print (celcius, "°C is equal to", farenheit, "°F")
```

6) calculate Simple interest :-

```
principle = 1000
rate = 5
time = 2
interest = (principal * rate * time) / 100
print("Simple interest:", interest)
```

7) Find the maximum of three numbers using if-else :-

```
a = 10
b = 20
c = 30
if a >= b and a >= c:
    print(a, "is the maximum")
elif b >= a and b >= c:
    print(b, "is the maximum")
else:
    print(c, "is the maximum")
```

8) Print all even numbers between 1 and 50

```
for i in range (2, 51, 2):
    print(i)
```

9) Check whether a year is a leap year:-

```
year = 2020
if year % 4 == 0 and (year % 100 != 0 or year % 400 == 0):
    print (year, " is a leap year")
else:
    print (year, " is not a leap year")
```

10) Print the multiplication table of a number :-

```
num = 5
for i in range (1, 11):
    print (num, " x ", i, " = ", num * i)
```

11) Calculate the sum of all numbers in a list:

```
numbers = [1, 2, 3, 4, 5]
sum = 0
for num in numbers:
    sum += num
print ("Sum of numbers:", sum)
```