

PYTHON DEVELOPER

Task 1:

1. The sum of two Numbers.

```
-> num1=1.5
```

```
num2=7.5
```

```
sum=num1+num2;
```

```
print ('the sum of {0} and {1} is {2}', format (num1, num2, sum))
```

Output : The sum of 1.5 and 7.5 is 9.

2. Odd or even.

```
-> num = int (input ("Enter a number : "))
```

```
If (num%2) ==0;
```

```
print ("{0} is even ", format(num))
```

```
else :
```

```
print("{0}", format(num))
```

Output: enter a number : 22

22 is even number.

3. Factorial Calculation.

-> num=7

num=int(input("Enter a number:"))

factorial =1

If num<0:

Print ("sorry, factorial does not exist for negative numbers")

else if num==0:

Print ("the factorial of 0 is 1")

else:

for i in range (1, num+1);

factorial =factorial*i

Print ("The factorial of ", num, "is",factorial)

Output : the factorial of 7 is 5040.

4. Fibonacci Sequence.

-> nterms =int (input (how many terms? "))

n1 ,n2=0,1

Count = 0

If nterms <= 0:

```
print(please enter a positive integer “)
```

```
elif nterms == 1:
```

```
print (“Fibonacci sequence upto “,nterms,”:”)
```

```
print (n1)
```

```
else
```

```
Print (“Fibonacci sequence:”)
```

```
While count < nterms :
```

```
Print(n1)
```

```
nth =n1 + n2;
```

```
n1=n2
```

```
n2=nth
```

```
Count += 1
```

Output: How many terms ?

0

1

1

2

3

5

5. Reverse a string.

```
-> s = "GeeksforGeeks"
```

```
rev = ""
```

```
for ch in s:
```

```
    rev = ch + rev
```

```
print(rev)
```

Output : skeeGrofskeeG.

6. Palindrome check.

```
-> my_str = "albohobia"
```

```
my_str = my_str.casefold()
```

```
rev_str = reversed (my_str)
```

```
If list(my_str) == list(rev_str):
```

```
    Print("the string is a palindrome:")
```

```
else:
```

Print("the string is not a palindrome:")

Output: the string is a palindrome.

7. Leap year check.

-> def is_leap_year(year):

If year % 4 == 0 and (year % 100 != 0 or year % 400 == 0):

Return True

else:

Return False

Example:

Year = 2024

Print(f"{year} is a leap year: {is_leap_year(year)}")

Output: 2024 is a leap year.

8. Armstrong number.

-> def is_armstrong(n):

num_str = str(n)

num_digits = len(num_str)

Return $n == \sum (\text{int}(\text{digit})^{**\text{num_digits}} \text{ for digit in num_str})$

Example

Print(is_armstrong(153))

Output: True.