



Assignment - 6

1. Convert Binary number to decimal

```
→ b-num = list(input("Input a binary number:"))  
value = 0  
for i in range(len(b-num)):  
    digit = b-num.pop()  
    if digit == '1':  
        value = value + pow(2, i)  
print("The decimal value of the number is", value)
```

2. Generate first N number of Fibonacci numbers. Take N value from user.

```
→ nterms = int(input("How many terms?"))  
# first two 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:
```

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```
print ("Fibonacci sequence:")
```

```
while count < n terms
```

```
    print(n1)
```

```
    nth = n1 + n2
```

```
    # update values
```

```
    n1 = n2
```

```
    n2 = nth
```

```
    count += 1
```

3) Display multiplication table of k. Take k value from user.

→

```
num = int(input("Enter the number:"))
```

```
print("Multiplication Table of", num)
```

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

```
    print(num, "x", i, "=", num * i)
```

4) Take 10 integers from keyboard using loop and print their average value on the screen

→

```
int main()
```

```
{
```




```
using namespace std;
int sum = 0, i, n;
for (i = 0; i < 10; i++)
{
    cout << "Enter number" << endl;
    cin >> n;
    sum = sum + n;
}
cout << "Sum is" << sum << endl;
return 0;
}
```

Print the following pattern:

```
*
* *
* * *
* * * *
```

→

```
def pypart(n):
    for i in range(0, n):
        for j in range(0, i+1):
            print("* ", end=" ")
        print("\n")
```

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5) Write a program to find GCD or HCF of given two numbers.

→

```
def compute_hcf(x, y):
```

```
    if x > y:
```

```
        smaller = y
```

```
    else
```

```
        smaller = x
```

```
    for i in range(1, smaller + 1):
```

```
        if ((x % i == 0) and (y % i == 0)):
```

```
            hcf = i
```

```
    return hcf
```

```
num1 = 54
```

```
num2 = 24
```

```
print("The H.C.F is", compute_hcf(num1, num2))
```

6) Write a python program that accepts a word from the user and reverse it.

→

```
word = input("Enter a word to reverse:")
```

```
for char in range(len(word) - 1, -1, -1):
```

```
    print(word[char], end=" ")
```

```
print("\n")
```




7) Write a python program to count the number of even and odd numbers from a series of numbers.

→

```
NumList = []
Even-count = 0
Odd-count = 0
Number = int(input("please enter the total number of list elements :"))

for i in range(1, Number+1):
    value = int(input("please enter the value of %d Element :"%i))
    NumList.append(value)
    for j in range(Number):
        if (NumList[j] % 2 == 0):
            Even-count = Even-count + 1
        else:
            Odd-count = Odd-count + 1
print("\n Total number of even numbers in this list = ", Even-count)
print("\n Total number of odd numbers in this list = ", Odd-count)
```

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8) Write a python program that prints all the numbers from 0 to 6 except 3 and 6

→

```
for x in range(6):  
    if (x == 3 or x == 6):  
        continue  
    print(x, end = ' ')  
print("\n")
```