1. Program to convert binary number into decimal number

```
b_num = list(input("Input a binary number: "))
value = 0
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)
```

Output:-

Input a binary number: 11011001

The decimal value of the number is 217

2. Program to generate first n number of fibonacci numbers

```
n = int(input("Enter the value of 'n': "))
a = 0
b = 1
sum = 0
count = 1
print("Fibonacci Series: ", end = " ")
while(count <= n):
print(sum, end = " ")
count += 1
a = b
b = sum
sum = a + b
```

Output:- Enter the value of 'n': 10

Fibonacci Series: 0 1 1 2 3 5 8 13 21 34.

3. Program to display the multiplication table of a value(k)

```
num = int(input("Display multiplication table of "))
for i in range(1, 11):
 print(num, 'x', i, '=', num*i)
```

Outut:- Display multiplication table of 10

10 x 1 = 10

10 x 2 = 20

10 x 3 = 30

10 x 4 = 40

10 x 5 = 50

10 x 6 = 60

10 x 7 = 70

10 x 8 = 80

10 x 9 = 90

10 x 10 = 100

4. Program to take 10 integers from keyboard using loop and print their average value on the screen

```
num = int(input('How many numbers: '))
total_sum = 0
for n in range(num):
 numbers = float(input('Enter number : '))
 total_sum += numbers
avg = total_sum/num
print('Average of ', num, ' numbers is :', avg)
```

Output:- How many numbers: 10

Enter number : 2

Enter number : 4

Enter number : 6

Enter number : 8

Enter number : 10

Enter number : 12

Enter number : 14

Enter number : 16

Enter number : 18

Enter number : 20

Average of 10 numbers is : 11.0

5. Program to print the pattern

```
k = 1
for i in range(0, 4):
 for j in range(0, k):
 print("* ", end="")
 k = k + 1
 print()
```

Output:-

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

6. Program to find H.C.F or G.C.D of 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. or G.C.D is", compute_hcf(num1, num2))
```

Output:-

The H.C.F. or G.C.D is 6

7. Program that accepts a word from user and reverse it

```
word = input("Input a word to reverse: ")
for char in range(len(word) - 1, -1, -1):
 print(“reverse word is “,word[char], end="")
print("\n")
```

Output:-

Input a word to reverse: GITAM UNIVERSITY

reverse word is YTISREVINU MATIG

8. Program to count the no.of even and odd numbers from a series of numbers

```
numbers = (1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15)
count_odd = 0
count_even = 0
```

```
for x in numbers:
 if not x % 2:
 count_even+=1
 else:
 count_odd+=1
print("Number of even numbers :",count_even)
print("Number of odd numbers :",count_odd)
```

Output:-

Number of even numbers : 7

Number of odd numbers : 8

9. 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")
```

Output:-

0 1 2 4 5