

2023

ASSIGNMENT-2

PYTHON

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Roll No. :- 3



1. Python Program to Convert Decimal to Binary, Octal and Hexadecimal

```
print('Convert Decimal to Binary, Octal and Hexadecimal')
```

```
a = int(input('Enter a decimal number to convert '))
```

```
b = bin(a)
```

```
h = hex(a)
```

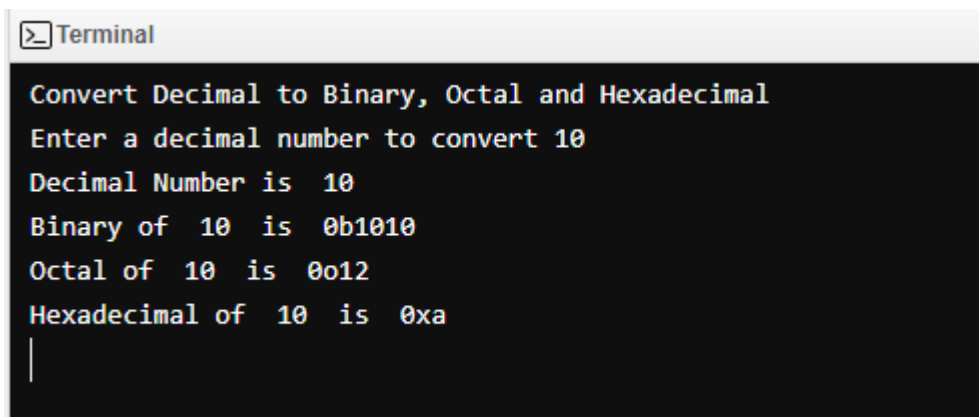
```
o = oct(a)
```

```
print("Decimal Number is ",a)
```

```
print("Binary of ",a," is ",b)
```

```
print("Octal of ",a," is ",o)
```

```
print("Hexadecimal of ",a," is ",h)
```

A terminal window titled "Terminal" with a dark background and light-colored text. It shows the output of the Python program for the input value 10. The output lines are: "Convert Decimal to Binary, Octal and Hexadecimal", "Enter a decimal number to convert 10", "Decimal Number is 10", "Binary of 10 is 0b1010", "Octal of 10 is 0o12", and "Hexadecimal of 10 is 0xa". A vertical cursor is visible at the end of the last line.

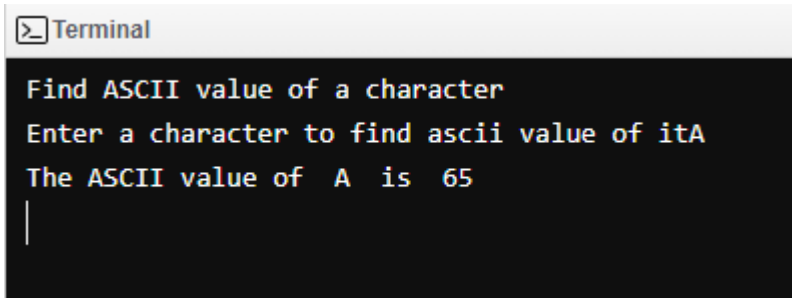
```
Terminal
Convert Decimal to Binary, Octal and Hexadecimal
Enter a decimal number to convert 10
Decimal Number is 10
Binary of 10 is 0b1010
Octal of 10 is 0o12
Hexadecimal of 10 is 0xa
|
```

2. Python Program To Find ASCII value of a character

```
print('Find ASCII value of a character')
```

```
a = input('Enter a character to find ascii value of it')
```

```
print('The ASCII value of ',a,' is ',ord(a))
```

A screenshot of a terminal window with a title bar that says "Terminal". The terminal has a black background with white text. It shows the output of a Python program. The first line is "Find ASCII value of a character". The second line is "Enter a character to find ascii value of it". The third line is "The ASCII value of A is 65". There is a vertical cursor line at the end of the third line.

```
Terminal  
Find ASCII value of a character  
Enter a character to find ascii value of itA  
The ASCII value of  A  is  65  
|
```

3. Python Program to Make a Simple Calculator

```
print('Simple Calculator')

a = float(input('Enter a numerical value'))

b = float(input('Enter another numerical value'))

print('Enter 1 for Addition')

print('Enter 2 for Substraction')

print('Enter 3 for Multiplication')

print('Enter 4 for Division')


def add(a,b) :

    r = a+b

    print('The Addition :- ',r)

def sub(a,b) :

    r = a-b

    print('The Substraction :- ',r)

def mul(a,b) :

    r = a*b

    print('The Multiplication :- ',r)

def div(a,b) :

    r = a/b

    print('The Division :- ',r)


c = int(input())

if c==1 :

    add(a,b)

elif c==2 :
```

sub(a,b)

elif c==3 :

mul(a,b)

else :

div(a,b)

```
Terminal
Simple Calculator
Enter a numerical value25
Enter another numerical value10
Enter 1 for Addition
Enter 2 for Substraction
Enter 3 for Multiplication
Enter 4 for Division
3
The Multiplication :- 250.0
|
```

4. Python Program to Display Fibonacci Sequence Using Recursion

```
print('Fibonacci Sequence Using Recursion')

n = int(input('Enter a number until you want fibbonaci series'))

def fib(c) :

    if c<=1 :

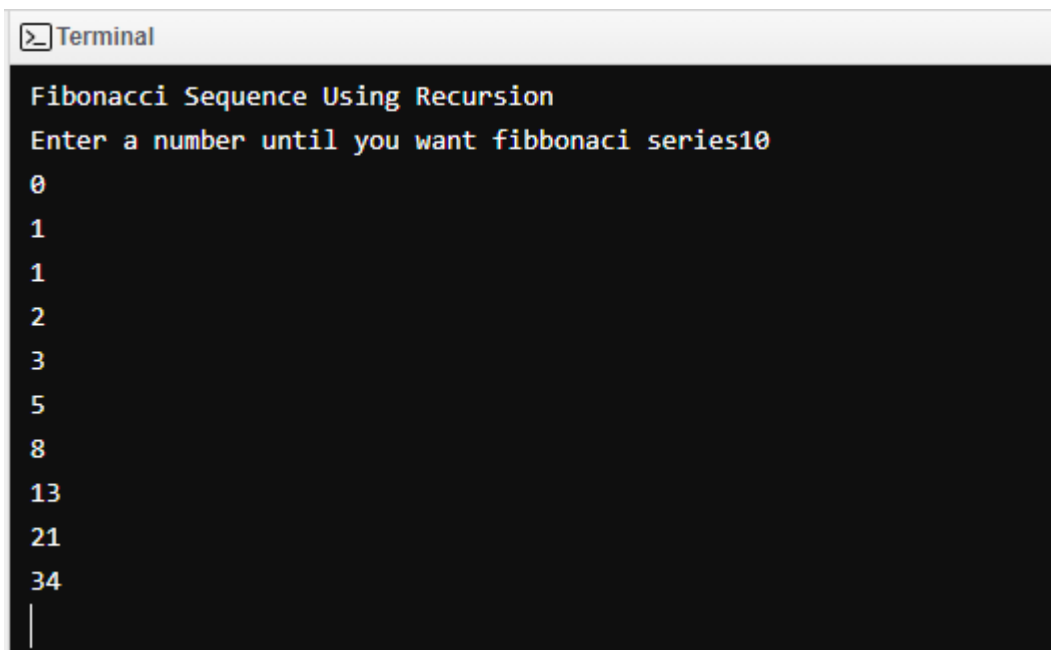
        return c

    else :

        return (fib(c-1) + fib(c-2))

for i in range(n):

    print(fib(i))
```

A terminal window titled "Terminal" with a dark background. It shows the output of the Python program. The first line is "Fibonacci Sequence Using Recursion". The second line is the prompt "Enter a number until you want fibbonaci series" followed by the user input "10". The subsequent lines show the Fibonacci sequence: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34. A vertical cursor is visible at the end of the last line.

```
> Terminal

Fibonacci Sequence Using Recursion
Enter a number until you want fibbonaci series10
0
1
1
2
3
5
8
13
21
34
|
```

5. Python Program to Find Factorial of Number Using Recursion

```
print("Find Factorial")

a = int(input('Enter a number to find factorial'))

b = a

f = 1

def fact(a):

    if a == 0:

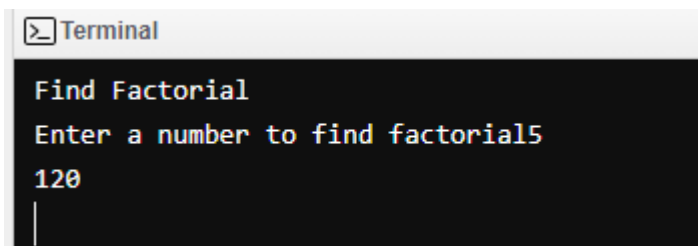
        f = 1

    else :

        f = a*fact(a-1)

    return f;

print(fact(b))
```

A screenshot of a terminal window with a dark background. The title bar of the window is light gray and contains a small icon of a terminal and the word "Terminal". The terminal content shows the program's output: "Find Factorial" on the first line, "Enter a number to find factorial" on the second line, the user input "5" on the third line, and the result "120" on the fourth line. A vertical cursor is visible on the fifth line.

```
Terminal
Find Factorial
Enter a number to find factorial5
120
|
```