LAB 1

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CSSE-4

#1 WAP to find the nth term of the fibonacii series.

```
def fib_num(n):
   if n<=0:
      print("Fibonacci can't be computed")
  # First Fibonacci number
   elif n==1:
      return 0
  # Second Fibonacci number
   elif n==2:
      return 1
   else:
      return fib_num(n-1)+fib_num(n-2)



n=int(input("Enter n: "))
print("{}th Fibonacci number is ".format(n),fib_num(n))
```

OUTPUT

```
Enter n: 6
6th Fibonacci number is  5
```

#2 WAP user defined python function to convert decimal number to binary .

```
def Dec_Bin(num):

    if num >= 1:
        Dec_Bin(num // 2)
    print(num % 2, end = '')


    # decimal value
dec_val = 24

    # Calling function
Dec_Bin(dec_val)
```

OUTPUT:

```
011000
```

#3 WAP to check number is prime or not and if prime print it's consecutive prime number.

```
def isPrime(n):
    if n>1 :
        for i in range(2, int(n/2)+1):
            if n%i == 0:
                return False
        return True
    else:
        return False


n = int(input("Enter a number: "))
if isPrime(n):
    print("Yes, it is a prime number")
    n += 1
    while not(isPrime(n)):
        n += 1
    print("Next prime number is: ", n)
else:
    print("No, it is not a prime number")
```

OUTPUT

```
Enter a number: 5
Yes, it is a prime number
Next prime number is:  7
```

#4 WAP to find the number of vowels and consonants, digits and special characters of a given string input.

```
def count_string(str):
    vowels = 0
    consonant = 0
    specialChar = 0
    digit = 0
    for i in range(0, len(str)):
```

```
        ch = str[i]
        if ( (ch >= 'a' and ch <= 'z') or (ch >= 'A' and ch <= 'Z') ):
            ch = ch.lower()
            if (ch == 'a' or ch == 'e' or ch == 'i'or ch == 'o' or ch == 'u'):
                vowels += 1
            else:
                consonant += 1
        elif (ch >= '0' and ch <= '9'):
            digit += 1
        else:
            specialChar += 1
    print("Vowels:", vowels)
    print("Consonant:", consonant)
    print("Digit:", digit)
    print("Special Character:", specialChar)
str = input("Enter a string: ")
count_string(str)
```

OUTPUT:

```
Enter a string: ty4#e
Vowels: 1
Consonant: 2
Digit: 1
Special Character: 1
```

#5 WAP to enter two character array and print them combined. Example: str1= INDIA str2= patna.

```
n1=input("string 1: ")
n2=input("string 2: ")
n3=""
if(len(n1)==len(n2)):
    for i in range(len(n1)):
        n3+=n1[i]+n2[i]
    print(n3)
else:
```

```
    print("Length is not same!")
```

OUTPUT

```
string 1: INDIA
string 2: patna
IpNaDtInAa
```