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Subject: CSE 120 Python Programming

Q.NO: 1 Write a python code for converting length in cm to km

In [1]:

```
a = float(input("Enter a value: "))
convert = a/1000
print(a ,"cm = ",convert, "km")
```

```
Enter a value: 4
4.0 cm =  0.004 km
```

Q.NO: 2 Write a python program to check whether given number is palindrome or not

In [3]:

```
num = int(input("Enter a number: "))
reversed_num = 0
check = num

while num >0 :
    digit = num % 10
    reversed_num = reversed_num * 10 + digit
    num //= 10

print("Reversed Number: ",(reversed_num))

if (check == reversed_num):
    print("The number you entered is a Palindrome")

else:
    print("Its not an Palindrome")
```

```
Enter a number: 405
Reversed Number:  504
Its not an Palindrome
```

Q.NO: 3 Write a menu driven program for the following task
    a. factorial number
    b. Prime number
    c. Digit Product
    d. Digit Sum

In [16]:

```
num = int(input("Enter a number "))
select = int(input("1.Factorial number\n" "2.Prime Number\n"
"3.Digit product\n" "4.Digit Sum \n"))

if select == 1:
    factorial = 1
    for i in range (1,num+1):
        factorial *= i

    print("The Factorial of",num, "is: ",end ="")
    print(factorial)

elif select == 2:
    temp = True
    if num > 1:
        for i in range(2,num//2 + 1):
            if num % i == 0:
                temp = False
                break
        if temp:
            print("It is a Prime Number")
        else:
            print("It is not a prime number")
    else:
        print("It is not a prime number")

elif select == 3:
    product = 1

    while num > 0:
        digit = num % 10
        product = product*digit
        num = num//10
    print("Product of digits is ",product)

elif select == 4:
    sum_val = 0
    while num > 0:
        digit = num % 10
        num = num//10
        sum_val = sum_val + digit

    print("Sum of digits is ",sum_val)
```

```
Enter a number 45
1.Factorial number
2.Prime Number
3.Digit product
4.Digit Sum
3
Product of digits is  20
```

Q.NO 4: Write a program to check whether given input is vowel or not

In [19]:

```
inp = input("Enter Character ")
if inp in ["a","e","i","o","u"]:
    print("It is a vowel in lower case")
if inp in ["A","E","I","O","U"]:
    print("It is a vowel in upper case")
else:
    print("It is a consonant")
```

```
Enter Character Q
It is a consonant
```

Q.NO 5: Write a program that prompts the user to enter a string. The program calculates and displays the length of the string until user enters "quit".
    HINT: use while loop

In [29]:

```
while True:
    inp = input('Enter a String:')
    if inp == "quit":
        break
    r = len(inp)
    print("The length of the string is ",r)
```

```
Enter a String:a
The length of the string is  1
Enter a String:dhuiasf
The length of the string is  7
Enter a String:iufa
The length of the string is  4
Enter a String:quit
```

Q.NO 6: Write a program to calculate parking charge of a vehicle. Enter the type of vehicle as character (c for car, b for bus, K for bike)
    and number of hours, then calculate charge as given below
    Bus- 20 per Hour
    Bike - 10 per hour
    Car - 15 Per Hour

In [28]:

```
time = int(input("Enter number of hours:"))
select =(input("1.c for Car\n2.b for Bus\n3.k for Bike\n"))
if (select == "c"):
    fare = time*15
    print("Fare is",fare,"Rs")
elif select == "b":
    fare = time*20
    print("Fare is",fare,"Rs")
elif select == "k":
    fare = time*10
    print("Fare is",fare,"Rs")
else:
    print("Please enter a valid input")
```

```
Enter number of hours:5
1.c for Car
2.b for Bus
3.k for Bike
k
Fare is 50 Rs
```

In [ ]:

```
```