

NAME:- M ARJUN

UNIQUE ID:- E0222054

SUBJECT:- CSE 120 PYTHON PROGRAMMING

1) Write a Python code for converting length in cm to km.

CODE:-

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

OUTPUT:-

Enter a value : 4

4.0 cm = 0.004 km

2) Write a Python program to check whether given number is palindrome or not.

CODE:-

```
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")
```

OUTPUT:-

Enter a number: 405

Reversed Number: 504

Its not an Palindrome.

3) Write a menu driven program for the following task

a) factorial number

b) prime number

c) Digit Product

d) Digit Sum

Code:-

```
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
```


③

```
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("Its not a prime number")
```

```
elif select == 3:
```

```
    Product = 1
```

```
    while num > 0:
```

```
        digit = num % 10
```

```
        product = product * digit
```

```
        num = num // 10
```

```
    print("Products 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)
```

OUTPUT

Enter a number 45

1) Factorial number

2) Prime number

3) Digit Product

4) Digit Sum.

³Product of digits is 20

4) Write a Program to check whether given input is vowel or not

CODE:

```
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")

OUTPUT:

Enter Character Q

It is a consonant

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.

CODE:

while True:

inp = input("Enter a String:")

if inp == "quit":

break

n = len(inp)

print("The length of the string is", n)

OUTPUT:

Enter a String: dhuiasf

The length of the string is 7.

Enter a String: a

The length of the string is 1.

Enter a String: quit.

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

CODE:

```
time = int(input("Enter numbers of hours: "))
select = input("1. c for Car\n 2. b for Bus\n 3. 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 an valid Input")
```


OUTPUT :

Enter ~~no.~~ of number of hours: 5

1. c for Car

2. b for Bus

3. k for Bike

k

Fare is 50 Rs