

Ex 7

Basic Python Programming

Date: 06.10.2020

Aim:

To study and implement the basic python programming.

Exercise

1. Design and implement a basic calculator.

Source Code :

```
a = int(input("enter the first number :"))
b = int(input("enter the second number :"))
c = int(input("enter the operation you want :\n 1.Add \n 2.Sub \n 3.Mul \n 4.Div \n"))
if c==1:
    print(a+b)
elif c==2:
    print(a-b)
elif c==3:
    print(a*b)
elif c==4:
    print(a/b)
else:
    print("choose the correct operation _ ")
```

Output :

```
enter the first number :12
enter the second number :34
enter the operation you want :
1.Add
2.Sub
3.Mul
4.Div
1
46
```

```
enter the first number :42
enter the second number :22
enter the operation you want :
1.Add
2.Sub
3.Mul
4.Div
2
20
,
```

```
enter the first number :45
enter the second number :15
enter the operation you want :
1.Add
2.Sub
3.Mul
4.Div
4
3.0
.
```

2. Find whether the given number is perfect or not.

Source Code :

```
Number = int(input(" Please Enter any Number: "))
Sum = 0
for i in range(1, Number):
    if(Number % i == 0):
        Sum = Sum + i
if (Sum == Number):
    print(" %d is a Perfect Number" %Number)
else:
    print(" %d is not a Perfect Number" %Number)
```

Output :

```
Please Enter any Number: 6
6 is a Perfect Number
> |
```

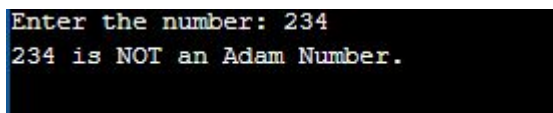
3. Find whether the given number is Adam's number or not.

Source Code :

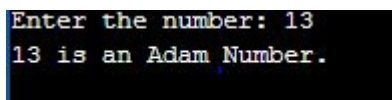
```
def isAdam(num):
    n = num
    rev = 0
    while n != 0:
        rev = rev * 10 + n % 10
        n = n // 10
    sn = num ** 2
    sr = rev ** 2
    n = sr
    rev = 0
    while n != 0:
        rev = rev * 10 + n % 10
        n = n // 10
    return sn == rev

num = int(input("Enter the number: "))
if isAdam(num):
    print(str(num) + " is an Adam Number.")
else:
    print(str(num) + " is NOT an Adam Number.")
```

Output :



```
Enter the number: 234
234 is NOT an Adam Number.
```



```
Enter the number: 13
13 is an Adam Number.
```

4. Write a program to check whether the given number is Armstrong or not.

Source Code :

```
num = int(input("Enter a number: "))
sum = 0
temp = num

while temp > 0:
    digit = temp % 10
```

```
sum += digit ** 3
temp //= 10

if num == sum:
    print(num,"is an Armstrong number")
else:
    print(num,"is not an Armstrong number")
```

Output :

```
Enter a number: 125
125 is not an Armstrong number
```

```
Enter a number: 153
153 is an Armstrong number
```

Results:

The study and implementation of the basic python programming are studied and executed.

Video : https://youtu.be/_8995DFtF-c