```
''' name=  s . ghazi haider
    class = IOT
    Teacher name=  S . M muazam '''
```

```
' name=  s . ghazi haider\n    class = IOT\n    Teacher name=  S . M muazam '
```

```
#Q1, Write a program to reverse an integer in Python.
Number = int(input("Please Enter any Number: "))
Reverse = 0
while(Number > 0):
    Reminder = Number %10
    Reverse = (Reverse *10) + Reminder
    Number = Number //10

print("\n Reverse of entered number is = %d" %Reverse)
```

```
 Please Enter any Number: 455467841

  Reverse of entered number is = 148764554
```

```
# Q2, Write a program in Python to check whether an integer is
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")
```

```
Enter a number: 85
85 is not an Armstrong number
```

```
#Q3) Write a program in Python to check given number is prime
#or not.
num = 21
if num > 1:
    for i in range(2, int(num/2)+1):
        if (num % i) == 0:
            print(num, "is not a prime number")
            break
    else:
        print(num, "is a prime number")
```

```
else:
    print(num, "is not a prime number")
```

```
 21 is not a prime number
```

```
# Q4) Write a program in Python to print the Fibonacci series
# using iterative method.
def Fibonacci(n):
    if n < 0:
        print("Incorrect input")
        return 0
    elif n == 1 or n == 2:
        return 1
    else:
        return Fibonacci(n-1) + Fibonacci(n-2)

print(Fibonacci(9))
```

```
 34
```

```
# Q5) Write a program in Python to check whether a number is
# palindrome or not using iterative method.
x = "malayalam"
w = ""
for i in x:
    w = i + w
if (x == w):
    print("Yes")
else:
    print("No")
```

```
 Yes
```

```
# Q6) Write a program in Python to find greatest among three
# integers.
a = 10
b = 14
c = 12
print(max(a, b, c))
```

```
 14
```

```
# Q7) Write a program in Python to check if a number is binary?
um = int(input("please give a number : "))
while(num>0):
```

```
    j=num%10
    if j!=0 and j!=1:
        print("num is not binary")
        break
    num=num//10
    if num==0:
        print("num is binary")
```

```
 please give a number : 2121
 num is not binary
```

```
# Q8) Write a program in Python to find sum of digits.

n=int(input("Enter a number:"))
tot=0
while(n>0):
    dig=n%10
    tot=tot+dig
    n=n//10
print("The total sum of digits is:",tot)
```

```
 Enter a number:14
 The total sum of digits is: 5
```

```
# Q9) Write a program in Python to swap two numbers without
# using third variable?
x = 6
y = 9
print ("Before swapping: ")
print("Value of x : ", x, " and y : ", y)
x, y = y, x

print ("After swapping: ")
print("Value of x : ", x, " and y : ", y)
```

```
 Before swapping:
 Value of x :  6  and y :  9
 After swapping:
 Value of x :  9  and y :  6
```

```
# Q10) Write a program in Python to swap two numbers using
# third variable?
num1= 80
num2= 500

print("Before swapping: number1 =",num1," and number2 =",num2)
temp = num1
num1 = num2
```

```
num2 = temp
print("After swapping: number1 =",int(num1)," and number2 =",int(num2))
```

```
 Before swapping: number1 = 80  and number2 = 500
```

```
# Q12) Python Program to calculate factorial using iterative
# method.
def factorial(n):
    return 1 if (n==1 or n==0) else n * factorial(n - 1)
num =int(input('enter num :'))
print ("Factorial of",num,"is",
    factorial(num))
```

```
 enter num :8
 Factorial of 8 is 40320
```

```
# Q13) Python Program to calculate factorial..
def factorial(n):
    return 1 if (n==1 or n==0) else n * factorial(n - 1)
num = 4
print ("Factorial of",num,"is",
    factorial(num))
```

```
 Factorial of 4 is 24
```

```
# Q14) Python Program to check a given number is even or odd.
def evenOdd(n):
    if(n % 2 == 0):
        return True
    elif(n %2 != 0):
        return False
    else:
        return evenOdd(n)
num = 3
if(evenOdd( num )):
    print(num ,"num is even")
else:
    print(num ,"num is odd")
```

```
 3 num is odd
```

```
# Q15) Python program to print first n Prime Number.
def Prime(n):
    for i in range(2,n//2+1):
        if(n%i==0):
            return(0)
    return(1)
```

```
N=int(input("Enter N:"))
i=2
lst=[]
while(1):
    if(Prime(i)):
        lst.append(i)
        if(len(lst)==N):
            break
    i+=1
print("First "+str(N)+" Prime numbers are:",end="")
print(*lst)
```

```
Enter N:45
First 45 Prime numbers are:2 3 5 7 11 13 17 19 23 29 31 37 41 43 47 53 59 61 67 71 73 79
```

```
# Q16) Python Program to print Prime Number in a given range.

lower = 900
upper = 1000

print("Prime numbers between", lower, "and", upper, "are:")

for num in range(lower, upper + 1):
   # all prime numbers are greater than 1
   if num > 1:
       for i in range(2, num):
           if (num % i) == 0:
               break
       else:
           print(num)
```

```
Prime numbers between 900 and 1000 are:
907
911
919
929
937
941
947
953
967
971
977
983
991
997
```

```
# Q17) Python Program to find Smallest number among three.
def smallest(x, y, z):
  if x <= y and x <= z:
```

```
    min = x
  if y <= x and y <= z:
    min = y
  if z <= x and z <= y:
    min = z
  print("Smallest number among", x,",", \
        y,"and",z,"is: ",min)

smallest(100, 50, 25)
smallest(50, 50, 25)
```

```
     Smallest number among 100 , 50 and 25 is:  25
     Smallest number among 50 , 50 and 25 is:  25
```

```
# Q18) Python program to calculate the power using the POW
# method.
print("The value of 3**4 is : ", end="")
print(pow(3, 4))
```

```
     The value of 3**4 is : 81
```

```
# Q19) Python Program to calculate the square of a given number.
n = 4
square = n * n
print(square)
```

```
     16
```

```
# Q20) Python Program to calculate the cube of a given number
number = int(input("Enter the number: "))

cube = number ** 3

print("The cubed value is:",cube)
```

```
     Enter the number: 5
     The cubed value is: 125
```

```
# Q21) Python Program to calculate the square root of a given
# number.
num = 8
num_sqrt = num ** 0.5
print('The square root of %0.3f is %0.3f'%(num ,num_sqrt))
```

```
     The square root of 8.000 is 2.828
```

```
# Q22) Python Program to Convert Decimal Number into Binary.
def decimalToBinary(n):
    return "{0:b}".format(int(n))
if __name__ == '__main__':
    print(decimalToBinary(8))
    print(decimalToBinary(18))
    print(decimalToBinary(7))
```

```
1000
10010
111
```

```
# Q23) Python Program to convert Decimal number to Octal
# number.
dec = 344

print("The decimal value of", dec, "is:")
print(bin(dec), "in binary.")
print(oct(dec), "in octal.")
print(hex(dec), "in hexadecimal.")
```

```
The decimal value of 344 is:
0b101011000 in binary.
0o530 in octal.
0x158 in hexadecimal.
```

```
# Q24) Python Program to check the given year is a leap year or
# not.
year = 2000
if (year % 400 == 0) and (year % 100 == 0):
    print("{0} is a leap year".format(year))
elif (year % 4 ==0) and (year % 100 != 0):
    print("{0} is a leap year".format(year))
else:
    print("{0} is not a leap year".format(year))
```

```
2000 is a leap year
```

```
# Q25) Python Program to convert Celsius to Fahrenheit.
celsius = float(input("Enter temperature in celsius: "))
fahrenheit = (celsius * 9/5) + 32
print('%.2f Celsius is: %0.2f Fahrenheit' %(celsius, fahrenheit))
```

```
Enter temperature in celsius: 4
4.00 Celsius is: 39.20 Fahrenheit
```

```
# Q26) Python Program to convert Fahrenheit to Celsius.
temperature = float(input("Please enter temperature in fahrenheit:"))
celsius = (temperature - 32) * 5 / 9
print("Temperature in celsius: " , celsius)
```

```
Please enter temperature in fahrenheit:5
Temperature in celsius:  -15.0
```

✓ 0s completed at 8:57 AM