1. #Program to check the triangle is equilateral or not.

print("Input lengths of the triangle sides: ")

x = int(input("x: "))

y = int(input("y: "))

z = int(input("z: "))

if x == y == z:

print("Equilateral triangle")

else:

print("Not equilateral triangle")

1. #Program to read the range and dispaly the numbers that is divisible by 3 and 5

a = int(input("Enter lower range limit:"))

b = int(input("Enter upper range limit:"))

for i in range(a, b+1):

if((i%3==0) & (i%5==0)):

print(i)

1. #Program to Print pattern

for i in range (65,70):

for j in range(65,i+1):

print(chr(i),end="")

print()

1. #Python program to read the marks in 5 subjects and compute the percentage and grade

sub1=int(input("Enter marks of the first subject: "))

sub2=int(input("Enter marks of the second subject: "))

sub3=int(input("Enter marks of the third subject: "))

sub4=int(input("Enter marks of the fourth subject: "))

sub5=int(input("Enter marks of the fifth subject: "))

avg=(sub1+sub2+sub3+sub4+sub4)/5

print(f"Percentage = {avg}")

if(avg>=90):

print("Grade: A")

elif(avg>=80 and avg<90):

print("Grade: B")

elif(avg>=70 and avg<80):

print("Grade: C")

elif(avg>=60 and avg<70):

print("Grade: D")

else:

print("Grade: F")

1. #Program to find the roots of quadratic equation

a=int(input("Enter a: "))

b=int(input("Enter b: "))

c=int(input("Enter c: "))

d=b\*\*2-4\*a\*c

d1=d\*\*0.5

if(d<0):

print("The roots are imaginary. ")

else:

r1=(-b+d1)/2\*a

r2=(-b-d1)/2\*a

print("The first root: ",round(r1,2))

print("The second root: ",round(r2,2))

6) #Program using while loop asks user for a number and prints a countdown from that number to zero.

num = int(input("Enter your number: "))

while(num>=0):

print(num)

num=num-1

7) #Python program to print prime numbers in the given range

a = int(input("Enter lower range: "))

b = int(input("Enter upper range: "))

for num in range(a,b + 1):

if num > 1:

for i in range(2,num):

if (num % i) == 0:

break

else:

print(num)

8) #Program to display fibonacci sequence for n terms

n = int(input("Enter the value: "))

a = 0

b = 1

sum = 0

count = 1

print("Fibonacci Series: ", end = " ")

while(count <= n):

print(sum, end = " ")

count += 1

a = b

b = sum

sum = a + b

9) #Program to compute gcd of two numbers

x = int(input("Enter 1st number: "))

y = int(input("Enter 2nd number: "))

i = 1

while(i <= x and i <= y):

if(x % i == 0 and y % i == 0):

gcd = i

i = i + 1

print("GCD is", gcd)

10) #Program to read a number and print the binary of that number

n = int(input("Enter a number: "))

a = ""

while n > 0 :

a = str(n % 2) + a

n = int(n / 2)

print("Binary number :", a)