QUES:1

Radius=int(input(“enter radius”))

area=3.14\*(radius)\*\*2

print("area of circle=",area)

OUTPUT:-

enter radius24

area of circle= 1808.64

QUES:2

ANS2:- base=int(input("base of triangle"))

height=int(input("height of triangle"))

area=0.5\*base\*height

print("area of triangle=",area)

OUTPUT:-

base of triangle24

height of triangle12

area of triangle= 144.0

QUES:3

ANS3:- maths=int(input("enter the marks of maths="))

science=int(input("enter the marks of science="))

english=int (input("enter the marks of english="))

average=(maths+science+english)/3

percantage=(maths+science+english)/300\*100

print("average=",average)

print("percantage=",percentage)

OUTPUT:-

enter the marks of maths=98

enter the marks of science=97

enter the marks of english=95

average= 96.66666666666667

#REALATION OPERATORS

a, b=8,10

print(a>b)

print(a<b)

print(a>=b)

print(a<=b)

print(a!=b)

#LOGICAL OPERATORS

a,b,c=10,23,40

print(a>b and b<c)

print(a>b or b<c)

print(not (a>b or b<c))

#ASSIGNMENT OPERATERS

a,b=10,20

a+=b

print(a)

#IDENTITY OPERTAORS

A,B,Z=9,9,9

print(A is B)

print(Z is not B)

#CONDITION STATEMENTS

QUES:4 WAP to print simple interst.

QUES:5 WAP to input temprature in celsius and then convert it into farhrenheit.

ANS:-4

P=int(input("enter the number="))

R=int(input("enter the number="))

T=int(input("enter the number="))

SI=(P\*R\*T)/100

print("simple interst=",SI)

OUTPUT:-

enter the number=2000

enter the number=4

enter the number=2

simple interst= 160.0

ANS:-5

T=float(input("enter temp. in celsium="))

F=(T\*9/5)+32

print("temp. in farhrenheit=",F)

OUTPUT:-

enter temp. in celsium=24

temp. in farhrenheit= 75.2

QUES:-6 WAP to print compound interst

ANS6:- P=int(input("enter the principle="))

R=int(input("enter the rate="))

T=int(input("enter the time="))

n=int(input("enter the number="))

A=P\*(1+(R/n))\*\*n\*T

CI=A-P

print("compund interst=",CI)

OUTPUT:-

enter the principle=2000

enter the rate=3

enter the time=4

enter the number=3

compund interst= 62000.0

QUES:-7 WAP to calculte EMI

ANS:-

P=int(input("enter principle="))

R=int(input("enter rate="))

T=int(input("enter time="))

N=int(input("enter number="))

EMI=(P\*R\*(1+R)\*\*N)/((1+R)\*\*N-1)

print("EMI=",EMI)

QUES:-8 WAP to temprature and convert into kelvin

ANS:- 8

T=float(input("enter temp. in celusin="))

F=(T\*9/5)+32

print("F=",F)

#Math library

#import math

from math import \*

print(sqrt(8))

print(pow(2,3))

print(abs(-10))

print(ceil(7.8))

print(floor(7.8))

print(pi)

print(round(8.5578,3))

QUES:-9 WAP to print area of triangle using heron's formula

by taking all sides as input

QUES:-10 WAP to calculate using pow function

ANS:-9

a=int(input("enter 1st side"))

b=int(input("enter 2nd side"))

c=int(input("enter 3rd side"))

s=(a+b+c)/2

from math import \*

area=sqrt(s\*(s-a)\*(s-b)\*(s-c))

print("area=",area)'''

#SYNTAX:

if (condition):

#statements

else

#statements

QUES:-11 WAPto input a number and check wheather its postive and negative

ANS:-

num=int(input("enter the number"))

if(num>0):

print("positve")

else:

print("negative")

QUES:-12 as well as 3 using if-else

ANS:-

num=int(input("enter the num"))

if(num%5==0 and num%3==0):

print("the num is divisible")

else:

print("the num is not divisible")

QUES:-12 WAP to input a charater and check whether it is a vowel or constant.

ANS:-12 ch=input("enter the character")

if (ch=='a' or ch=='e' or ch=='i' or ch=='o' or ch=='u'):

print("vowel")

else:

print("constant")

#Multiple Condition Statement

if(condition):

#statement

elif(condition):

#statement

elif(condition):

#statement

elif(condition):

#statement

QUES:-13 WAP to input marks of a student and print their grade according to the following:

marks grade

90 to 100 A+

80 to 90 A

70 to 80 B+

60 to 70 B

50 to 60 C

40 to 50 D

30 to 40 E

less than 30 F

marks=int(input("enter the marks"))

if(marks>=90 and marks<=100):

print("A+")

else(marks>=80 and marks<90):

print("A")

else(marks>=70 and marks<80):

print("B+")

else(marks>=60 and marks<70):

print("B")

else(marks>=50 and marks<60):

print("c")

else(marks>=40 and marks<50):

print("D")

else(marks>=30 and marks<40):

print("E")

else(marks<=30):

print("F")

QUES:-13 WAP to input three number and print the largest one.

QUES:-14 WAP to input a year and check whether its is leap year or not .

ANS:-14

year=int(input("enter year to be checked"))

if(year%4==0 and year%100!=0 or year%400==0):

print("the year is a leap year")

else:

print("the year is not a leap year")

QUES:-15WAP to input an operater and two number and based on the operater perform the operator between the two numbers.

E.g. if operater is +, then print the addition of two number and so on......

ANS13:-

a=int(input("enter the a="))

b=int(input("enter the b="))

c=int(input("enter the c="))

if(a>b and a>c):

largest=a

elif(b>c):

largest=b

else:

largest=c

print(largest,"is the largest of three numbers.")

ANS15:-

op=input("enter the operater")

a=int(input("enter the first number"))

b=int(input("enter the second number"))

if(op=='+'):

print(a+b)

elif(op=='-'):

print(a-b)

else:

pass

QUES16 :-WAP to print the health status of a person by following:

BMI Weight Status

below18.5 Under Status

18.5-24.9 Normal

25.0-24.9 Overweight

30.0 and above Obese

Note:

TO calculate BMI:

input weigh(kg) and height(in cm) and then apply the formula:

weight divided by square of height.

ANS16:-

weight=int(input("enter weight in kg:"))

height=float(input("enter height in m:"))

bmi=weight/(height)\*\*2

print("bmi=",bmi)

if(bmi<18.5):

print("underweight")

elif(bmi>=18.5 and bmi<=24.9):

print("normal")

elif(bmi>=25 and bmi<=29.9):

print("underweight")

else:

print("obese")

#Nested if

if(condition): #outer-if

if(condition): #inner-if

#statements

elif(condition):

QUES17:-WAP to input three numbers and arrange them ascending order using nested-if.

ANS17:-num1,num2,num3=int(input()),int(input()),int(input())

if(num1<num2 and num1<num3):

if(num2<num3):

print(num1,num2,num3)

else:

print(num1,num3,num2)

elif(num2<num1 and num2<num3):

if(num1<num3):

print(num2,num1,num3)

else:

print(num2,num3,num1)

else:

if(num1<num2):

print(num3,num1,num2)

else:

print(num3,num2,num1)

QUES18:-WAP to largest number using nested-if.

ANS18:-

a=int(input("enter the 1st number"))

b=int(input("enter the 2nd number"))

c=int(input("enter the 3rd number"))

if(a>b):

if(a>c):

print("a is largest")

else:

print("c is largest")

elif(b>c):

if(b>a):

print("b is largest")

else:

print("a is largest")

else:

if(a<c):

print("c is largest")

else:

print("a is largest")

#Loops:

1. for loop-> A counting loop.

2. while loop->condition loop.

range() function:

range(start,stop,step)

range(1,10)--> 1,2,....9

range(5,10)--> 5,6,....9

range(1,10,2)--> 1,3,5,7,9

range(10,0,-1)--> 10....1

for variable in <sequence>:

#statements

for i in range(1,21):

print(i)

QUES19:- WAP to print all even numbers from 10 to 20

ANS19:-

for i in range(10,20):

if(i%2==0):

print(i)

QUES20:- WAP to print the sum of all even aur odd numbers from 10 to 20.

ANS20:-

se=so=0

for i in range(10,21):

if(i%2==0):

se=se+i

else:

so=so+i

print(se,so)

QUES21:- WAP to input a number print its factorial using for loop.

ANS21:-

n=0

for fact in range(1,21):

for(n%2==0)

QUES22:- WAP to print foolowing fibonanci series using for loop:

0 1 1 2 3 5 8 13

ANS22:-

n1,n2=0,1

print(n1)

print(n2)

for i in range(1,8):

i=n1+n2

print(i)

n1=n2

n2=i

QUES23:- WAP to print the following series

1/1!+1/2!+1/3!+.....+1/n!

ANS23:-

n=int(input("enter any num"))

for i in range(1,n+1):

print("1/",i,"!+",end=' ')

n=int(input("enter any number"))

s,f=0,1

for i in range(1,n+1):

f\*=i

m=1/f

s+=m

print(s)