**ARITHMETIC OPERATION :-**

**PROGRAM:-**

**num 1=int(input(“Enter first number:”))**

**num 2=int(input(“Enter second number:”))**

**print(“Addition:”,num 1+ num 2)**

**print(“Subtraction:”,num 1-num 2)**

**print(“Multiplication:”,num 1\*num2)**

**print(“Division:”,num 1/num 2)**

**OUTPUT:-**

**Enter first number :1**

**Enter second number :2**

**Addition :3**

**Subtraction : -1**

**Multiplication :2**

**Division :0.5**

**SWAPPING OF VALUES:-**

**PROGRAM:-**

**METHOD 1**

**p = int(input("Enter the First Value :"))**

**q = int(input("Enter the Second Value :"))**

**print("The values before swapping are",p,q)**

**temp = p**

**p = q**

**q = temp**

**print("The Values after swapping are",p,q)**

**OUTPUT:-**

**Enter the First Value :48**

**Enter the Second Value :52**

**The values before swapping are 48 52**

**The Values after swapping are 52 48**

**SWAPPING OF VALUES:-**

**METHOD:-2[USING COMMA (,) OPERATOR]**

**PROGRAM:-**

**s = 59**

**t = 16**

**print("The values before Swapping : ",s,t)**

**s, t = s, t**

**print("The values after Swapping : ",s,t)**

**OUTPUT:-**

**The values before Swapping : 59 16**

**The values after Swapping : 59 16**

**SWAPPING OF VALIES :-**

**METHOD:-3[USING ARITHMETIC OPERATOR]**

**PROGRAM:-**

**x = 45**

**y = 25**

**print("The Values before Swapping are",x,y)**

**x = x + y**

**y = x - y**

**x = x - y**

**print("The Values after Swapping are",x,y)**

**OUTPUT:-**

**The Values before Swapping are 45 25**

**The Values after Swapping are 25 45**

**METHOD 4 USING XOR OPERATOR:-**

**PROGRAM:-**

**j = 58**

**k = 46**

**Mprint("The Values before Swapping are",j,k)**

**j = j ^ k**

**k = j ^ k**

**j = j ^ k**

**print("The Values after Swapping are",j,k)**

**OUTPUT:-**

**The Values before Swapping are 58 46**

**The Values after Swapping are 46 58**

**DISTANCE BETWEEN TWO POINTS:-**

**PROGRAM:-**

**x1=int(input("Enter the Value of x1 :"))**

**x2=int(input("Enter the Value of x2 :"))**

**y1=int(input("Enter the Value of y1 :"))**

**y2=int(input("Enter the Value of y2 :"))**

**D1=(x2-x1)\*\*2**

**D2=(y2-y1)\*\*2**

**result=(D1+D2)\*\*0.5**

**print("Distance between",(x1,x2),"and",(y1,y2),"is : ",result)**

**OUTPUT:-**

**Enter the Value of x1 :2**

**Enter the Value of x2 :6**

**Enter the Value of y1 :4**

**Enter the Value of y2 :7**

**Distance between (2, 6) and (4, 7) is : 5.0**

**FIND THE WEIGHT AND COST OF APPLE:-**

**PROGRAM:-**

**Cost = int(input(“Enter the cost of 1kg of apple:”))**

**Weight = int(input(“Enter the weight (in kg):”))**

**Total = cost\*weight**

**Print(“the total cost of apple is :”,total))**

**OUTPUT:-**

**Enter the cost of 1kg of apple :150**

**Enter the weight of the apple bought :2**

**Amount to be paid is 300**

**TO FIND THE TOTAL OF BOOKS AND TO GIVE 5% DISCOUNT ON USING PYTHON PROGRAM:-**

**PROGRAM:-**

**N1= int(input(“Enter price of book 1:”))**

**N2= int(input(“Enter price of book 2:”))**

**N3= int(input(“Enter price of book 3:”))**

**N4= int(input(“Enter price of book 4:”))**

**N5= int(input(“Enter price of book 5:”))**

**Total = n1+n2+n3+n4+n5**

**Print(“The total price of the books :”,Total)**

**Print(“5% of discount on 5 books “)**

**Discount=0.05\*total**

**Total amount= Total – Discount**

**Print(“Total price after discount is :”,Total amount)**

OUTPUT:-

**Enter price of book 1:-500**

**Enter price of book 2:-200**

**Enter price of book 3:-150**

**Enter price of book 4:-350**

**Enter price of book 5:-400**

**The total price of books :-1600**

**5% discount on 5 books**

**The total price after discount is :-1520.0**

**CONVERT CELSIUS TO FAHRENHEIT**

**PROGRAM:-**

**F = int(input(“Enter the temperature in Fahrenheit :”))**

**Celsius = 5/9\*(F-32)**

**Print (“Fahrenheit into Celsius is :”,Celsius)**

**OUTPUT:-**

**Enter the temperature in Fahrenheit :100**

**Fahrenheit into Celsius is :23.55555556**

**CALCULATE SIMPLE INTEREST**

**PROGRAM:-**

**P = int(input(“Enter the value of p:”))**

**R = int(input(“Enter the value of R:”))**

**T = int(input(“Enter the value of T:”))**

**Simple Interset = P\*R\*T/100**

**Print (“The simple interest is :”, simple interest )**

**Print (“Total amount you get ,”T,” years is:” P +simple interest)**

**OUTPUT:-**

**Enter the value of P : 20000**

**Enter the value of R : 12**

**Enter the value of T : 4**

**The simple interest is :9600.0**

**Total amount you get after 4 years is : 29600.0**

**CIRCULATING THE VALUES (METHOD-1 Using Inbuilt function)**

**PROGRAM:-**

**s=int(input("Enter a the Values in the List :"))**

**list=[]**

**for i in range(0,s):**

**element=int(input("Enter the Value :"))**

**list.append(element)**

**print("Circulating the list")**

**for i in range(0,s):**

**element\_deleted=list.pop(0)**

**list.append(element\_deleted)**

**print(" The Circulated list after",i+1,"rotation",list)**

**OUTPUT:-**

**Enter a the Values in the List :8**

**Enter the Value :5**

**Enter the Value :9**

**Enter the Value :2**

**Enter the Value :1**

**Enter the Value :7**

**Enter the Value :0**

**Enter the Value :3**

**Enter the Value :2**

**Circulating the list**

**The Circulated list after 1 rotation [9, 2, 1, 7, 0, 3, 2, 5]**

**The Circulated list after 2 rotation [2, 1, 7, 0, 3, 2, 5, 9]**

**The Circulated list after 3 rotation [1, 7, 0, 3, 2, 5, 9, 2]**

**The Circulated list after 4 rotation [7, 0, 3, 2, 5, 9, 2, 1]**

**The Circulated list after 5 rotation [0, 3, 2, 5, 9, 2, 1, 7]**

**The Circulated list after 6 rotation [3, 2, 5, 9, 2, 1, 7, 0]**

**The Circulated list after 7 rotation [2, 5, 9, 2, 1, 7, 0, 3]**

**The Circulated list after 8 rotation [5, 9, 2, 1, 7, 0, 3, 2]**

**CIRCULATING THE VALUES (METHOD-2)**

**PROGRAM:-**

**def circulate(c,n):**

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

**d=c[i:]+c[:i]**

**print("Circulate","=",d)**

**return**

**c=[178,289,324,448,570,698,188,842,956,106]**

**n=int(input("Enter n :"))**

**circulate (c,n)**

**OUTPUT:-**

**Enter n :6**

**Circulate = [289, 324, 448, 570, 698, 188, 842, 956, 106, 178]**

**Circulate = [324, 448, 570, 698, 188, 842, 956, 106, 178, 289]**

**Circulate = [448, 570, 698, 188, 842, 956, 106, 178, 289, 324]**

**Circulate = [570, 698, 188, 842, 956, 106, 178, 289, 324, 448]**

**Circulate = [698, 188, 842, 956, 106, 178, 289, 324, 448, 570]**

**Circulate = [188, 842, 956, 106, 178, 289, 324, 448, 570, 698]**

**PRIME NUMBER OR NOT:-**

**PROGRAM:-**

**g=int(input("Enter the Value of a :"))**

**i=2**

**for i in range(2,g):**

**if g%2==0:**

**print("The Given Number is NOT PRIME ")**

**break**

**else:**

**print("The Given Number is PRIME")**

**OUTPUT:-**

**Enter the Value of a :5678**

**The Given Number is NOT PRIME**

**PROGRAM TO FIND THE GIVEN YEAR IS LEAP YEAR OR NOT:-**

**PROGRAM:-**

**Year=int(input("Enter the Year :"))**

**if(Year%4==0):**

**if(Year%100==0):**

**if(Year%400==0):**

**print("The given Year is Leap Year")**

**else:**

**print("The given Year is not a Leap Year")**

**OUTPUT:-**

**Enter the Year :20000**

**The given Year is Leap Year.**