Python Programming

Lab Assignment – 4

Based Of General Programmes :

1. WAP to swap two integer values using third variable.

2. WAP to swap two integer values without using third variable.

3. WAP to convert temperature degree centigrade to degree Fahrenheit.

4. WAP to calculate area and perimeter of circle, square, and rectangle.

5. WAP to check the entered year is "Leap year" or "not Leap year".

6. WAP to calculate the total salary of an employee, where the basic salary of employee is 10,000 and TA is 10%,DA is 20% and HRA is 30% of basic salary.

1. WAP to swap two integer values using third variable.

Sol :

```
a = 5
b = 10
print("Before swapping:"a =", a,"b =",b)
temp =a
a = b
b = temp
print("\nAfter swapping:"a =", a,"b =",b)
```

Sol :

```
a = 5
b = 10
print("Before swapping: "a =", a,"b =", b)
a = a + b
b = a - b
a = a - b
print("\nAfter swapping: "a =", a, "b =", b)
```

3. WAP to convert temperature degree centigrade to degree Fahrenheit.

Sol :

```
celsius = 25
fahrenheit = (celsius * 9/5) + 32
print(f"Temperature in Celsius: {celsius}°C")
print(f"Temperature in Fahrenheit: {fahrenheit}°F")
```

Sol :

```
r = int(input("Enter the radius = "))
print(f"The Area of Circle is = ",3.14*r*r)
print(f"The Periemeter of Circle is = ",2*3.14*r)


side = int(input("Enter the side = "))
print(f" The Perimeter of Square is = ", side*side)
print(f" The Area of Sqaure is = ",side*4)


l = int(input("Enter the length of recatangle = "))
w = int(input("Enter the width of rectangle = "))
print(f" The Area of rectangle is = ",l*w)
print(f" The perimeter of recatngle = ", l*w*2)
```

5. WAP to check the entered year is "Leap year" or "not Leap year".

Sol :

```
year = int(input("Enter the Year = "))
if year%4==0 and year%400!=0 or year%100==0:
    print(f"This is Leap year ")
else:
    print(f"Not a leap year ")
```

6. WAP to calculate the total salary of an employee, where the basic salary of employee is 10,000 and TA is 10%,DA is 20% and HRA is 30% of basic salary

Sol :

```
Bas_sal = 10000
ta = 0.10*Bas_sal
da = 0.20*Bas_sal
hra = 0.30*Bas_sal

tot_sal = Bas_sal + ta + da + hra

print(f" Basic Salary is = ",Bas_sal)
print(f" Travel Allowance is = ",ta)
print(f" Dearness Allowance is = ",da)
print(f" House Rent Allowance is = ",hra)
print(f" Total Salary is = ",tot_sal)
```