

Execution Programs

1. Write a program to create a list of 6 fruit names and perform add, remove, sort, and reverse operations on the list.

Algorithm

Step 1 Start

Step 2 i) Initialize a list fruit containing fruit names.

ii) Print the initial list of fruits

Step 3 i) Append a new fruit 'strawberry' to the end of the list using append () method

ii) Print the updated list after adding the new fruit

Step 4 i) Remove the fruit 'Orange' from the list using the remove ()

ii) Print the updated list after removing the fruit

Step 5 i) Sort the list in ascending order using the sort ()

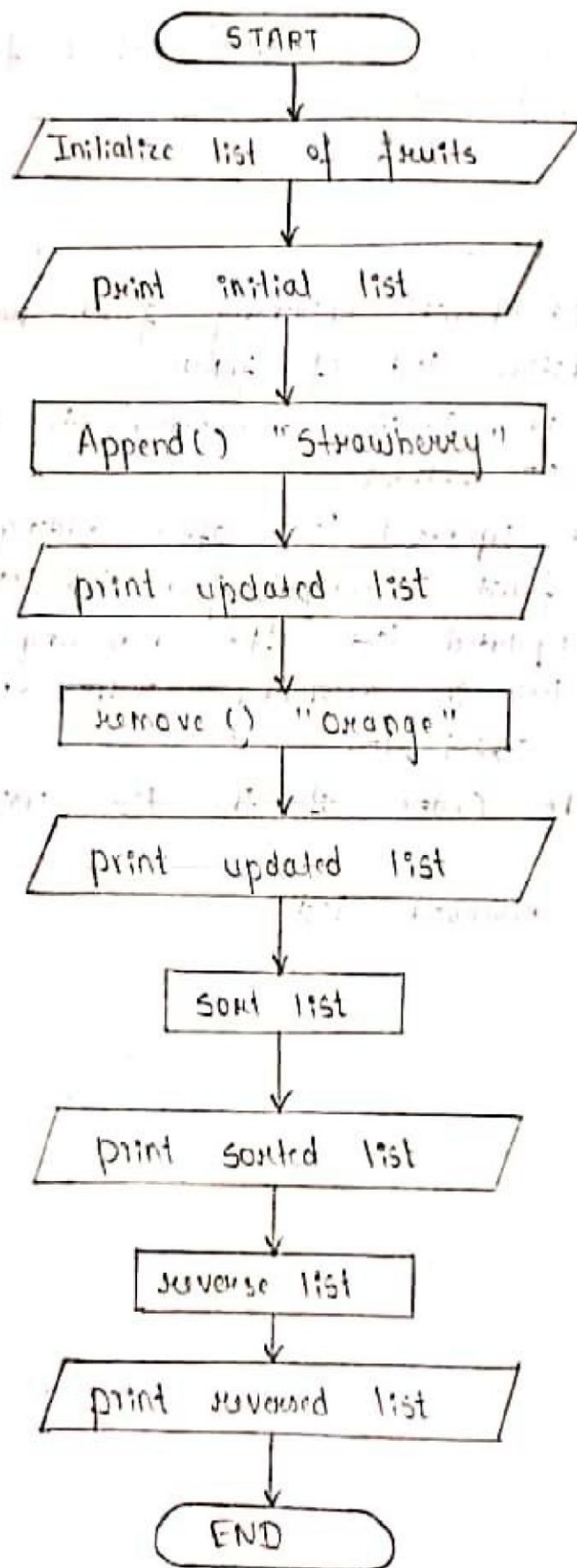
ii) Print the sorted list

Step 6 i) Reverse the Order of the list using reverse () method

ii) Print the reversed list

Step 7 End

Flowchart



Program

```
Fruits = ["Apple", "Banana", "Orange", "Mango", "Grapes", "Blueberry"]
```

```
print("List of Fruits: ", Fruits)
```

```
Fruits.append("Strawberry")
```

```
print("After adding Strawberry: ", Fruits)
```

```
Fruits.remove("Orange")
```

```
print("After removing Orange: ", Fruits)
```

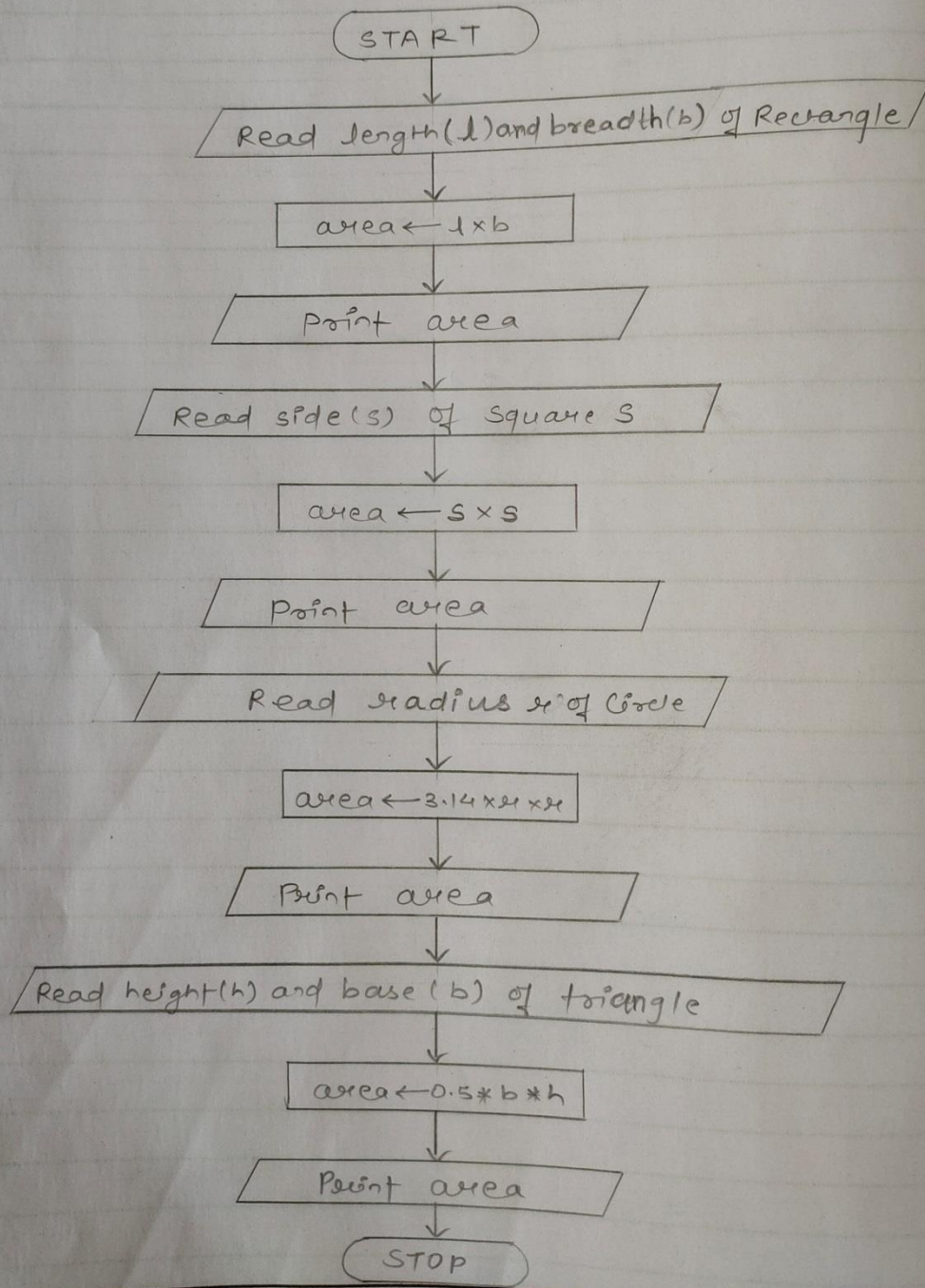
```
Fruits.sort()
```

```
print("Sorted list: ", Fruits)
```

```
Fruits.reverse()
```

```
print("Reversed list: ", Fruits)
```


E6:- Flowchart to find the area of rectangle, square, circle and triangle.



EG: Write a Python program to find the area of rectangle, square, circle and triangle by accepting suitable input parameters from user using user-defined function.

* Algorithm to find the area of rectangle, square, circle and triangle.

1> START

2> Read length(l) and breadth(b)

3> $area \leftarrow l \times b$

4> print area

5> Read the side of square s

6> Calculate the area of square

$area \leftarrow s \times s$

7> print area

8> Read radius of circle into r

9> Calculate area of circle

$area \leftarrow 3.14 \times r \times r$

10> print area

11> Read height(h) and base(b) of triangle

12> Calculate area of triangle

$area \leftarrow 0.5 \times b \times h$

13> print area

14> STOP

Q6. Write a Python program to find the area of Rectangle, Square, Circle and Triangle by accepting suitable input parameters from user using user-define function ?

```
def rectangle() :  
    print ("\nRectangle")  
    l=float(input('Enter the length = '))  
    b=float(input('Enter the breadth = '))  
    area=l*b  
    print ('Area of Rectangle = ',area)  
  
def square() :  
    print ("\nSquare")  
    s=float(input('Enter the value = '))  
    area=s*s  
    print ('Area of Square = ',area)  
  
def circle() :  
    print ("\nCircle")  
    r=float(input('Enter the radius = '))  
    area=3.14*r*r  
    print ('Area of Circle = ',area)  
  
def triangle() :  
    print ("\nTriangle")  
    h=float(input('Enter the height = '))  
    b=float(input('Enter the base = '))  
    area=0.5*b*h  
    print ('Area of Triangle = ',area)
```

```
rectangle()  
square()  
circle()  
triangle()
```

OUTPUT:

```
Rectangle  
Enter the length = 4  
Enter the breadth = 5  
Area of Rectangle = 20.0
```

```
Square  
Enter the value = 6  
Area of Square = 36.0
```

```
Circle  
Enter the radius = 5  
Area of Circle = 78.5
```

```
Triangle  
Enter the height = 8  
Enter the base = 4  
Area of Triangle = 16.0
```

2. Write a Python program to input any 10 numbers and find out the second largest number without using sort function.

```
def second_largest(num):
    first=max(num[0],num[1])
    second=min(num[0],num[1])
    for n in num[2:] :    if n >
    first:
    first, second = n, first
    elif first > n >
    second:
    second = n
    return second

num=[]
#taking runtime input
print('Enter any 10 numbers')
for n in range(5):
    item=input('num'+str(n+1)+'=')
    num.append(item) #calling
    function
sl=second_largest(num)
print('Second Largest Number=',sl)
```

5. Write a program to demonstrate the concept of method overriding in python.

```
class Parent(object):
    def __init__(self): #double underscore
    self.value = 4
    def get_value(self):
    print("Parent Class")
    return self.value

class Child(Parent):
    def get_value(self):
    print("Child Class")
    return self.value + 1
objc=Child()
print("value=",objc.get_value())
```