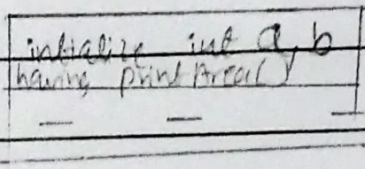
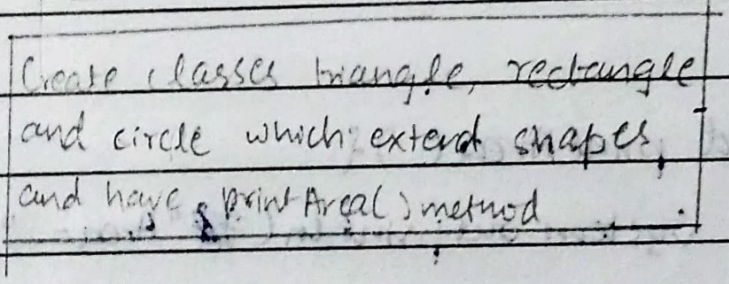
Flowchart:

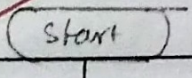
4. abstract class Shapes:

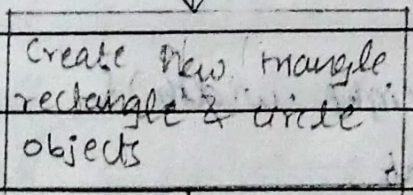




public class ShapeProg {

public static void main():





~~Algorithm~~

Program:

```
import java.util.*;
abstract class shapes{
    int a, b;
    void printArea(){};
}
class Triangle extends shapes{
    int a, b;
    Triangle(base, alt){
        a = base;
        b = alt;
    }
    void printArea(){
        System.out.println("Area = "+
    }
}
extends Shapes
```

```
        System.out.println("Area = " +(a * b));
        }
}
class Circle extends Shapes{
    int a,b;
    double area;
    void printArea(){
        area = 3.14 * a * a;
        System.out.println("Area = " + area
    }
}
public class ShapeProg{
    public static void main(String[] ar
        Triangle t = new Triangle(5,5)
        Rectangle r = new Rectangle(5,
        Circle c = new Circle(5);
        t.printArea();
        r.printArea();
        c.printArea();
    }
}
```

Algorithm:

Step 1: Start

step 2: Create Triangle object t;

Rectangle object r;

③ Output:

Enter the value of n:
2
Enter the name, author, price, number
James AtomicHabits 300 200
Enter the name, author, price, number
Cruyff Myturn 400 174
Details of book:
Name: James
Author: AtomicHabits
Price: 300
Num pages: 200
Details of book:
Name: Cruyff
Author: My Turn
Price: 400
Num pages: 174

④ Output:

Area = 12.5
Area = 25
Area = 78.5

19/10/24

```
Area =12.5
Area =25
Area =78.5
1BM22CS024 Agneya D A
```