EX:NO: 01	Area of
Date: 4/07/23	1. Rectangle.

Aim:-

To write a java program to find area of rectangle using classes.

Algorithm:-

Step 1:- Start the process.

Step 2:- Create a class "rectangle" and accept variable length and width and define getdata() and rect area() methods.

Step 3:- Create a mainclass "rect are" and declare two variable a1, a2 and create two objects rect.1 and rect.2 = for rectangle classes to get two different area of a rectangle.

Step 4:- Call the methods by giving actual parameter values and compute it for the two different area values.

Step 5 : Assign the area values of rect 1 to variable a1 and values of rect 2 to variable a2.

Step 6 : print and display the area of a1 and a2.

Step 7 : stop the process.

Results :

The above Java program was successfully compiled and executed and got the area of rectangle.

EX : NO : 02	
Date : 10/07/23	2. Single Inheritance.

AIM :-

TO find Area and volumn of a room using single inheritance

Algorithm :-

Step 1 : Start

Step 2 : Accept the length and breadth as input.

Step 3 : Initialized the length = x;
breadth = y;
height = z;

Step 4 : perform the string and the following

```
hall h1 = new hall (10,10,10);
int v1 = h1.values();
int v1 = h1.area();
```

Step 5 : Then the print the area and volume

Step 6 : Stop.

Result :-

The above program was compiled and successfully executed.

Ex: No: 03	3. CREATING PACKAGES
Date: 18/4/23	

Aim:-

To create package using input statement and fully classified name.

Algorithm:-

Step 1: Start

Step 2: create a class package and class name A;

Step 3: To create another class.

Step 4: To import an the packageA.

Step 5: To create can object of class A.

```
Obj = new A();
Obj. Msg();
```

Step 6: using import keyword using package A and package B.

Step 7: To create another class name package.

Step 8: To create another class name package 2;

Step 9: To import a class row package A and 1.A package 2.B;

Step 10: To create an object of class

A.a1 = new A();

B.a1 = new B();

Step 11: STOP.

Result:

The above program was compiled and Successfully executed.

Ex:No: 04	
Date: 20/4/23	4. Interface

Aim:-

To find interface area of circle rectangle using interface.

Algorithm:-

Step 1: Start

Step 2: Create class new using key keyword interface.

Step 3: create class rectangle to add an values as return it.

Step 4: To create another class name circle using keyword implements

Step 5: To create object for rectangle r, circle c, and area A.

Step 6: Display the result.

Step 7: STOP.

Result :-

The above program was compiled and Successfully.

EX:NO: 05	
Date : 26/7/23	5. EXCEPTION HANDLING

Aim :-

To implement find the program to Arithemetic exception.

Algorithm :-

Step 1 :- Start

Step 2 :- Accept the a, b, c, x, y; as input.

Step 3 :- Initialized a=10 ; b=6; c=6;

Step 4 :- program the string and the following process.

x = a/(b-c);

Y = a/(b+c);

Step 5 :- print the value division by zero and the value y = +y;

Step 6 :- stop

Result :-

The above program was compiled and successfully executed.

EX:NO: 06	6. CREATING THEARD.
Date: 28/7/23	

Aim:-

To create a thread by implementing runnable interface.

Algorithm:-

Step 1:- Start.

Step 2:- create class name using Runnable interface.

Step 3:- create thread 't', and run the try method

Step 4:- using for (loop) for
cint i=5; i>0; i--);

Step5:- sleep method to delay the child thread
Thread.sleep (500);

Step 6:- use after method Catch (interrupted exception e).

Step 7 :- class Main class name demothread.

Step 8 :- New keyword new. thread ().

Step 9 :- using for loop (for (int i=5 ; i>0; i--);

Step 10 :- print ~~and~~ Mainthread is interrupted Main thread except.

Step 11 :- STOP.

Result :-

The above program was Compiled and Successfully executed.

EX:NO: 07	7. MULTITHREAD.
Date: 3/8/23	

Aim :-

To create a multithread using runnable interface.

Algorithm :-

Step 1 :- Start

Step 2 :- create class name using runnable interface.

Step 3 :- String name, create thread my thread (this, name)

Step 4 :- using for loop for (int i=5; i > 20; i++);

Step 5 :- Sleep method to delay the thread for 1000.
Thread.sleep (1000).

Step6 :- create class main demo multithread.

Step 7 : Thread new Thread ("One");
new MyThread ("Two");
new MyThread ("Three");
try;

Step 8 :- catch method using
catch Interrupted Exception)

Step 9 :- println Main thread message
and Main thread existing

Step 10 :- Stop.

Result :-
The above program was compiled and successfully executed.

EX:NO: 08	8. INTERTHREAD COMMUNICATION.
Date: 11/8/23	

Aim :-

To write a program to implements interthread communication.

Algorithm :-

Step 1 :- Start

Step 2 :- create class and declare boolean valueset = false.

Step 3 :- If valueset try wait C1, method if exception caught print exception.

Step 4 :- By get declare valueset = false; return the value.

Step 5 :- Declare value = true return the value.

Step 6 :- By creating interthread class producing by implementing by in runnable interface.

step 7:- In class producer declare int i=0; and following statement while (true) q.put (i++);

step 8:- create another interthread class consumer by implementing runnable interface

step 9:- Declare the following statement while (true) q.get();

step 10:- create main class and declare the following statement

```
q = new q();
new .producer(q);
new .consumer(q);
```

step 11:- press ctrl . c to stop.

Result:-

The above program was compiled and successfully executed.

EXNO : 09	9. STRING METHODS
Date: 16/8/23	

Aim :-

To implement string handling method in Java program.

Algorithm :-

Step 1 :- Start

Step 2 :- create class named string ex1;

Step 3 :- Declare ch as character

Step 4 :- use char A1(2) to display the character.

Step 5 :- use string concatenate in different string.

Step 6 :- use string declare string I chars I to convert array to string.

Step 7: use length() to display caught of given String.

Step 8:- we get charAt() to print out the characters

Step 9:- use trim method to print out the trimmed String.

Step 10: use index of() to print the index value.

Step 11: Stop.

Result:

The above program was Compiled and successfully executed.

EX:NO:	10. COPY FILE.
Date : 22/2/23	

AIM :-

TO write a java program to copy the content from one text file to another text file.

Algorithm :-

Step 1 :- Start the process

Step 2 :- Create a main class file copyFile1 and introduce file Reader and file writer classes

Step 3 :- Create and read a first text file and type some content in it. (eg. java.txt).

Step 4 :- Create the second text file to copy the content from the existing file (eg. anew.txt).

Step 5 :- Check the condition OF both the file and write the content from first file to the second file.

Step 6 :- STOP copying the content when the string is NULL in first file.

Step 7:- compile run and see the copied content in the second file.

Step 8:- Stop the process.

Result:-

The above Java program was successfully executed and verified the copied content of second text file from the first text file.

EX:NO : 11	11. DRAWING DIFFERENT SHAPES
Date : 3/8/23	

Aim :

To display different shapes using display methods.

Algorithm :-

Step 1 :- START

step 2 :- Import Applet class and AWT classes

step 3 :- create class App1 extending Applet.

step 4 :- using drawline () draw a Line.

Step 5 :- using set. Colour fill the rectangle.

step 6 :- using set. Colour fill draw rect () draw a Rectangle.

step 7 :- using round Rect () draw a round Rectangle.

Step 8 :- using drawings() draw a display "Line Rectangle Rectangle demo".

Step 9 :- using draw oval() draw oval and fill with colour.

Step 10 :- STOP.

Result :-

The above program was Compiled and successfully executed.

EX:NO: 12	12. HUMAN FACE
Date : 12/9/23	

Aim :-

To view the human face using Applet viewer.

Algorithm :-

Step 1 :- Start

Step 2 :- import applet class and AWT CTRL.

Step 3 :- To create class faces extends Applet.

Step 4 :- using g.draw oval (40, 40, 120, 150);

Step 5 :- using g.draw oval (57, 75, 30, 20);

Step 6 :- using g.fill oval draw the given number.

Step 7 :- using width = 200, height = 200 draw the human face.

Step 8 :- view the human face

Step 9 :- Stop.

Result :-

The above program was compiled and successfully executed.

EX:NO: 13	15. AWT CONTROLS.
Date : 19/9/23	

Aim :-

TO implement any 5 awt CONTROLS.

Algorithm :-

Step 1 :- Start

Step 2 :- import java.awt.*;

Step 3 :- create java.awt.event.*;

Step 4 :- create class by extending frame.

Step 5 :- Declare class by extending text field button b1, b2.

Step 6 :- set new layout by set layout (new flow layout());

Step 7 :- Add (item, and item2, name, Pass (b1, b2. and set bounds on suitable coordinates

Step 8: set visibility size and title by following.

M1. set visible (true);
M2. set size (400, 400);
M1. set title ("My login window");

Step 9: stop.

Result:

The above program was compiled and successfully executed.

EX NO: 14	14. Student Database.
Date: 5/10/23	

Aim :-

To perform the Database connectivity concept for data reading.

Algorithm :-

Step 1 :- Start.

Step 2 :- Create a new text document and type the java program for implementing the datatype connectivity from data reading.

Step 3 :- "Import" keyword is used to import the java to package and java.sql package

Step 4 :- "create" a base class named products.

Step 5 :- "try" block is used to find the errors, if the program is stopped.

step 6:- create the data base connectivity using odbc. jdbc. driver statement.

step 7:- create stmt object for reading a data from table from the database.

step 8:- print the data in the student name, student age, student class. as field in the table from the data base.

step 9:- using the java program while loop to print all the database which is the data base table

step 10:- save the java program using "javac" command compile and run the java program using "java" and "java" command.

step 11:- STOP.

Result:-

The above program was compiled and successfully executed.