

LAB MANUAL

OOP THROUGH JAVA LAB

Course code: 340

Department of Computer Engineering

Semester: 3

List of programs

Cycle I

- 1. Largest among two numbers**
- 2. Grade calculation**
- 3. Print the number up to 10**
- 4. Implementation of class and object**

Cycle II

- 5. Implementation of constructor**
- 6. Command line arguments**
- 7. Constructor overloading**

Cycle III

- 8. Implement simple inheritance**
- 9. Implement multilevel inheritance**
- 10. Implement multiple inheritance**

Cycle IV

- 11. Exception handling**
- 12. Multithreading**
- 13. Implementation of packages**
- 14. Applet programming**

Program I

Largest among two numbers

AIM

To find the largest number in two numbers by using a java program

Algorithm:

1. Start
2. Declare a class large
3. Start the main function
4. Declare three variables a,b,c
5. Get the value of a and b
6. Compare a and b
7. If a greater than b
8. Then c=a
9. Else
10. C=b
11. Print large is c
12. stop

Program:

output

```
javac large.java
java large
largest number is 17
```

Program II

Grade calculation

AIM

To find the grade of a student using a java program

Algorithm:

1. Start
2. Declare a class grade
3. Start the main function
4. Declare variable tot
5. Get the value of tot

6. Using switch case
7. If tot=10
8. Print grade=A
9. Else If tot=9
10. Print grade=B
11. Else If tot=8
12. Print grade=C
13. Else If tot=7
14. Print grade=D
15. Else If tot=6
16. Print grade=E
17. Else If tot=5
18. Print grade=F
19. Else
20. Print FAILED
21. stop

Program

Program III

Print the number up to 10

AIM

To print the whole numbers up to 10 using a java program

Algorithm:

1. Start
2. Declare a class onto10
3. Start the main function
4. Declare variable a
5. For a=1 ,a>=10,a++
6. Print a
7. stop

Program

Program IV

Implementation of class and object

AIM

To find the area of rectangle using class and object

Algorithm:

1. Start
2. Declare a class rectangle
3. Declare variables length, breadth, area
4. define function getdata()
 - 4.1. get length and breadth
5. define function cal()
 - 5.1. Area=length*breadth
6. define function display()
 - 6.1. print area of the rectangle
7. Declare class rectangle area
8. Start the main function
9. Create object r1
10. Call function getdata()
11. Call function cal()
12. Call function display()
13. stop

Program

Program V

Implementation of constructor

AIM

To find the area of rectangle using constructor

Algorithm:

1. Start
2. Declare a class rectangle
3. Declare variables length, breadth, area
4. define constructor
 - 4.1. get length and breadth
5. define function cal()
 - 5.1. Area=length*breadth
6. define function show()

- 6.1. print area of the rectangle
7. Declare class area
8. Start the main function
9. Create object r1 with object initializing using constructor // calling constructor
10. Call function getdata()
11. Call function cal()
12. Call function show()
13. stop

Program

Program VI

Command line arguments

AIM

To implement command line argument in java program

Algorithm:

1. Start
2. Declare a class rectangle
3. Declare variables length, breadth, area
4. define constructor
 - 4.1. get length and breadth
5. define function cal()
 - 5.1. Area=length*breadth
6. define function show()
 - 6.1. print area of the rectangle
7. Declare class area
8. Start the main function
9. Create object r1 with object initializing using constructor // calling constructor
10. Call function getdata()
11. Call function cal()
12. Call function show()
13. stop

Program