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| *A close up of a logo  Description automatically generated* | *DEPARTMENT OF COMPUTER ENGINEERING* |

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| Semester | S.E. Semester III – Computer Engineering |
| Subject | Object Oriented Programming Using Java (Skill Based Lab) |
| Subject Professor In-charge | Prof. Indu Anoop |
| Laboratory | Online Lab |

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| Roll Number | 20102A0004 | |
| Grade and Subject Teacher’s Signature |  |  |

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| Experiment | 1B | |
| Problem Statement | \*Write a program using vector to store list of ‘n’ number of students and perform following operation on it:  Insert a new name in vector  Delete a name from vector  Display contents of vector  Exit | |
| Resources / Apparatus Required | Hardware: Computer System | Software: jdk 1.8, Eclipse / Notepad++/IntelliJ IDEA |
| Details | while loop: A while loop is a control flow statement that allows code to be executed repeatedly based on a given Boolean condition. The while loop can be thought of as a repeating if statement.  switch: The switch statement is a multiway branch statement. It provides an easy way to dispatch execution to different parts of code based on the value of the expression. | |
| Code | import java.util.Scanner;  import java.util.Vector;  public class SwitchCaseProgram {  public static void main(String[] args) {  int n,i,c;  System.out.println("Enter number of students=");  Scanner t=new Scanner(System.in);  n=t.nextInt();  //Create vector to add names from user  Vector v=new Vector();  for(i=0;i<n;i++) {  System.out.println("Enter student name=");  String s=t.next();  v.addElement(s);  }  while(true) {  System.out.println("MENU\n1.Insert new student\n2.Delete student name\n3.Display list\n4.Exit\nEnter choice=");  c=t.nextInt();  if(c==4)  break;  switch (c) {  case 1:System.out.println("Enter name and position");  String s1=t.next();  int p=t.nextInt();  v.insertElementAt(s1, p);  System.out.println("Name is inserted");  break;  case 2:System.out.println("Enter name of student to be deleted");  String s2=t.next();  v.removeElement(s2);  System.out.println("Name is deleted");  break;  case 3:for (i = 0; i < v.size(); i++) {  System.out.println(v.elementAt(i).toString());  }  break;  default:System.out.println("Invalid choice");  break;  }  }  }  } | |
| Output |  | |
| Conclusion | We learned how to successfully use while and switch cases in a program.. | |