Thakur Polytechnic

Department of Computer Engineering



**SYCO B**

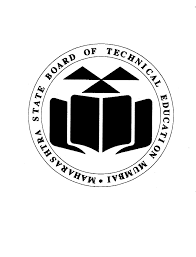
**SEMESTER- 4 [2018-2019]**

**(GROUP 20)**

SUB: JAVA PROGRAMMING

|  |  |
| --- | --- |
| **Roll no.** | **Group member** |
| 101 | Saurabh gavali |
| 102 | Sunny yadav |
| 103 | Shardul lokhande |
| 104 | Saurabh singh |
| 105 | Sachin yadav |
| 106 | Praveen prajapati |

**GUIDED BY – Mr. KASHIF SHAIKH**



**MHARASHTRA STATE**

**BOARD OF TECHNICAL EDUCATION**

**Certificate**

This is to certify that Group …20…Roll No.……101-106…. Of Fourth Semester of Diploma in …….Computer….Engineering(CO)…of institute ……Thakur polytechnic……(Code: 0522) has completed the Micro Project satisfactorily in course **Java Programming(22412)** for academic year 2018 to 2019 as prescribed in the curriculum.

Place: **Mumbai** Enrollment No:.…………….

Date:…………… Exam Seat No:….…………..

**Subject Teacher Head of the Department Principal**

**Proposal**

**Title of micro project:**

Generating the electricity bill using Default Arguments

An electricity board charges the following rates to domestic users to discourage large conceptions of energy.

100 units=Rs.1.50 p/unit

200 units=Rs.1.80 p/unit

Beyond 200 Rs.2.50 p/unit

All users are charged a minimum of the total amount is more than 300 then an additional surcharge of 15% is added. Write a java program to read the names of users, number of units consumed and print out the charge using default.

**Introduction:**

Object oriented programming is a programming model where programs are organized around objects and data rather than action and logic.

Java allows decomposition of a problem into a number of entities called objects and then builds data and functions around these objects.

1. The software is divided into a number of small units called objects. The data and functions are built around these objects.
2. The data of the objects can be accessed only by the functions associated with that object.
3. The functions of one object can access the function of another object.

**1.0Aim of the micro project:**

The micro project aims at

1. Generating the electricity bill using default arguments.
2. A user will be charged a minimum of Rs.50 and then after as per unit consumed by them.
3. If the bill generated is more than amount of 300 than the user will be 15% is added to the existing amount.

**2.0Course Outcomes Addressed:**

a) Develop program using Object Oriented Methodology in Java.

**3.0Proposed Methodology:**

First the needs of the program were discussed by drawing flowchart and writing algorithm. Then the actual program is to generate an ALP program for given equation using procedure. After that the programs were executed and were tested to get the desired outputs. After this main task the other tasks like creating the report and proposal were simultaneously done by the group members.

**4.0Action plan:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr. no.** | **Details of activity** | **Planned start date** | **Planned finish date** | **Name of Responsible Team Member** |
| 1. | Making of program | 11-12-2018 | 13-12-2018 | Saurabh gavali, Praveen prajapati |
| 2. | Making of proposal | 18-12-2018 | 20-12-2018 | Saurabh gavali, Sunny yadav, Shardul lokhande, Saurabh singh Praveen Prajapati, Sachin yadav |
| 3. | Demonstration of program | 22-12-2018 | 22-12-2018 | Sunny yadav, Praveen prajapati |
| 4. | Making of Report | 05-01-2019 | 07-01-2019 | Saurabh singh |

**5.0|Resource required:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sr.no.** | **Name of resource/material** | **specifications** | **Qty** | **Remarks** |
| 1. | Java | Jdk1.8.0  For windows 7 | 1 |  |
| 2. | Microsoft word 2013 | Microsoft office 2013 | 1 |  |

**Names of Team Members with Roll Nos.**

1. Saurabh Gavali
2. Sunny yadav
3. Shardul lokhande
4. Saurabh singh
5. Sachin yadav
6. Praveen prajapati

Kashif shaikh

(Subject in-charge)