**Test Plan**

The below tables represents the different types of testing of the project for the result calculation and also batch wise and module wise analysis.

**Table 1: Unit Testing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test ID** | **Description** | **Exp I/P** | **Exp O/P** | **Actual Output** |
| U\_01 | Checking cgpa calculation | Score obtained | Score in cgpa | As expected |
| U\_02 | Analysis of every batch code | Batch code, Emp Name &PS, Total number of batches | min, max, avg, SD, Kurt,  Top, Mid, Bottom blockers of batches. | Not exactly as expected |
| U\_03 | Analysis of every module | Module Score , Hours, credits  Module name, | Min, max, avg, SD, Kurt of modules.  Top, Mid, Bottom blockers of modules. | Not exactly as expected |
| U\_04 | Bar chart representation | Data of Top, Mid, Bottom blockers. | Visualisation of input data on graph | As expected |

**Table 2: Integration testing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test ID** | **Description** | **Exp I/P** | **Exp O/P** | **Actual Output** |
| I\_01 | Calculation of cgpa for each module | Projected points of modules | Finding score in cgpa | As expected |
| I\_02 | Batch wise Analysis by considering the scores of all the modules | Batch code, Emp name &PS,Total number of batches, score | Finding the batch wise min, max, avg, SD, Kurt score.  Top, Mid, Bottom blockers of batches. | Not exactly as expected |
| I\_03 | By using the given data, calculation for every modules - Module wise Analysis | Number of modules, each module score and , credits of each module | Finding the module wise min, max, avg, SD, Kurt score.  Top, Mid, Bottom blockers of modules. | Not exactly as expected |
| I\_04 | Module wise and batch wise analysis result will form the Bar chart. | Data of Top, Mid, Bottom blockers. | Visualisation of input data on graph | As expected |

**Table 2: System testing**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Test ID** | **Description** | **Exp I/P** | **Exp O/P** | **Actual Output** |
| S\_01 | Functionality and Calculation of cgpa for each module | Projected points of modules | Output should be in the form of cgpa | As expected |
| S\_02 | Checking the functionality of a code in batch wise by considering the scores of all the modules. | Batch code, Emp name &PS, Total number of batches, score | Finding the batch wise min, max, avg, SD, Kurt score.  Top, Mid, Bottom blockers of batches | Not exactly as expected |
| S\_03 | Checking the functionality of a code for Module wise analysis. | Number of modules, each module score and credits of each module | Finding the module wise min, max, avg, SD, Kurt for given data.  Top, Mid, Bottom blockers of modules. | Not exactly as expected |
| S\_04 | Module wise and batch wise analysis result will form the Bar chart. Functionality checking of the graphs by using obtained result. | Data of Top, Mid, Bottom blockers. | Visualisation of input data on graph | As expected |