University of Gujrat, Hafiz Hayat Campus



**Laboratory Exercise**

*For*

**Programming Fundamentals Lab**

**(IT-103)**

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| Course Instructor |  |
| Lab Instructor |  |
| Semester | Fall 2016 |

**PF Lab 6 Exercise**

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| **Objectives:**  Decision Control Structure (Switch Statement)   * Syntax of Switch-case statements. * Difference of switch case with multiple if-else statements. |

# Problem 6.1: Write C++ code for the problem statements.

**Write a program which to find the grace marks for a student using switch. The user should enter the class by the student and number of subject he has failed in. Use the following logic**

* **if the student gets first class and the number of subjects he failed in is greater than 3, the he does not get any grace marks. if number of subjects he failed is less than or equal to 3 then grace is of 5 marks per student.**
* **if the student gets Second class and the number of subjects he failed in is greater than 2, the he does not get any grace marks. if number of subjects he failed is less than or equal to 2 then grace is of 4 marks per student.**
* **if the student gets Third class and the number of subjects he failed in is greater than 1, the he does not get any grace marks. if number of subjects he failed is less than or equal to 1 then grace is of 3 marks per student.**

**Note:** Also, write pseudo code or flow chart of the above program. `

# Problem 6.2: Write C++ code for the problem statements.

Write a menu driven program which has the following options

* Factorial of a number
* Prime or not
* Odd or even
* Exit

Once a menu item is selected the appropriate action should be taken.

**Note:** Also, write pseudo code or flow chart of the above program.