

**JAYPEE UNIVERSITY OF ENGINEERING & TECHNOLOGY, GUNA**  
**DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**  
**Computer Programming Lab (14B17CI171)**  
**B.Tech. (CSE/ECE/MECH/CE/CHE) Semester-I**

Lab Experiment-6  
**C Programs: Decision Control**

**Syntax:**

<b>IF Statements</b>	<b>IF - ELSE Statements</b>	<b>NESTED IF Statements</b>	<b>IF – ELSE IF Statements</b>
<pre> if(expression) {     stmt 1;     stmt 2;     ..... } </pre>	<pre> if(expression) {     stmt 1;     stmt 2;     ..... } else {     stmt 1;     stmt 2;     ..... } </pre>	<pre> if(expression) {     stmt;     .....     if(expression)     {         stmt;         .....         if(expression)         {             stmt;             .....         }         stmt;     }     if(expression)     {         stmt;     } } </pre>	<pre> if(expression) {     stmt;     ..... } else if(expression) {     stmt;     ..... } else if(expression) {     stmt;     ..... } else {     stmt;     ..... } </pre>

**Practice**

1. Any integer is input through the keyboard. Write a program to find out whether it is an odd number or even number.
2. Any year is input through the keyboard. Write a program to determine whether the year is a leap year or not.
3. If the ages of Ram, Shyam and Ajay are input through the keyboard, write a program to determine the youngest of the three.

4. Write a program to check whether a triangle is valid or not, when the three angles of the triangle are entered through the keyboard. A triangle is valid if the sum of all the three angles is equal to 180 degrees.
5. Given the length and breadth of a rectangle, write a program to find whether the area of the rectangle is greater than its perimeter. For example, the area of the rectangle with length = 5 and breadth = 4 is greater than its perimeter.
6. Given three points (**x1, y1**), (**x2, y2**) and (**x3, y3**), write a program to check if all the three points fall on one straight line.
7. Write a program to find the greatest of the three numbers entered through the keyboard using conditional operators.
8. Any character is entered through the keyboard; write a program to determine whether the character entered is a capital letter, a small case letter, a digit or a special symbol.
9. Write a program to check whether a number (entered by the user) is negative or positive.
10. Write a program to check whether an alphabet entered by the user is a vowel or a consonant.