

Subject: Fundamentals of Computer and Programming

B.Tech-I (Div A to F)

Practice Assignment

Instructions:

- You have to submit the hardcopy (handwritten notebook) of the same, printed solutions are not accepted. ***Suitable date of submission will be announced later.***
- At the time of submission there will be a viva-vice so do it by yourself don't copy from your friends. Randomly any one of the program will be asked to explain.
- Write a program with proper syntax and indentation.

1. If cost price and selling price of an item is input through the keyboard, write a program to determine whether the seller has made profit or incurred loss. Also determine how much profit he made or loss he incurred.
2. Any integer is input through the keyboard. Write a program to find out whether the given number is an odd number or even number.
3. A five-digit number is entered through the keyboard. Write a program to obtain the reversed number and to determine whether the original and reversed number are equal or not.
4. If the ages of Ram, Shyam and Ajay are input through the keyboard. Write a program to determine the youngest of the three.
5. 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 the three angles is equal to 180 degrees.
6. Given the length and breadth of a rectangle, write a program to find whether the area of rectangle is greater than its perimeter.
7. Given the radius of a circle, write a program to find whether the area of circle is greater than its circumference.
8. 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 or not.
9. Any year is input through the keyboard. Write a program to determine whether the year is leap year or not. Use logical operator && and ||.
10. If the radius of a circle is input through the keyboard, write a program to find whether the area of circle is greater than its circumference.

hours, the worker is given training to improve his speed, if the time taken by the worker is more than 5 hours, then the worker has to leave the company. If the time taken by the worker is input through the keyboard, find the efficiency of the worker.

12. A library charges a fine for every book returned late. For first 5 days the fine is 50 paise, for 6-10 days fine is one rupees and above 10 days fine is 5 rupees. If you return the book after 30 days your membership will be cancelled. Write a program to accept the number of days the member is late to return the book and display the fine or the appropriate message.
13. Write a program to take one number from the command line. If the number is in-between 1 to 7 then display the corresponding day (Ex. 1-Sunday and 7-Saturday) otherwise display invalid number.
14. Read a character from the command prompt. Write a program to check whether the entered character is vowel or consonant.
15. Write a program to make a simple calculator using Switch Case. You have to take two number and also an operand (+, -, *, /, %) as an input from the user and perform the particular operation in the basis of user choice.