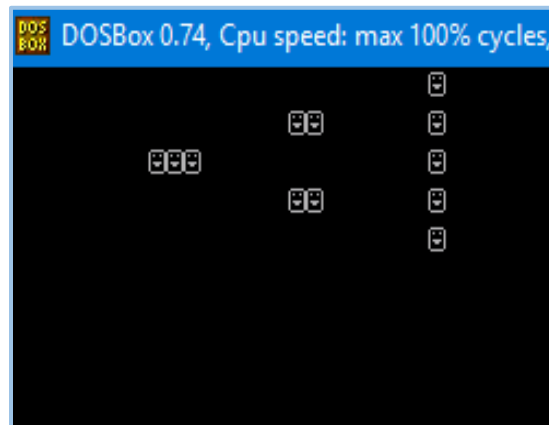# Lab 5

Introduction to C Programming

Marks: 8

Question 01:

Generate the following output. (hint: ASCII value of ☺ is 1)

Question 02:

Write a program that takes input the following values:
a) Amount
b) Interest Rate
c) Time Period
and returns the Future Value of that amount by using formula given below:

$$FV = PV * (1+i)^{\wedge}n$$

where,
FV is Future Value of that amount
PV is the Present Value that is given as input by user
"i" is the interest rate and
"n" is the Time period

Question 03:

Write a program in c language and take the 2 inputs, 1st one is integer base for example 9876 and 2nd one is float base 987.6543. Outcome as below.

4-digit integer right justified to 6 columns: 9876

4-digit integer right justified to 3 columns: 9876

Floating point number rounded to 2 digits: 987.65

Floating point number rounded to 0 digits: 988

Floating point number in exponential form: 9.876543e+02

Question 04:

Write a C program to input marks of five subjects Physics, Chemistry, Biology, Mathematics and Computer. Calculate marks obtained and percentage of that student.

Question 05:

Write a program which takes two integers and interchange them without using additional variable.

Question 06:

Perform arithmetic operations between two different data types and show that from which data type the result belongs to. (Implicit type casting, e.g. Integer+ float or integer/double etc.).

Question 07:

Write a program which separates ones, tens, hundreds and thousands from a four-digit user input. Use 0000 as default value, given input should replace 0000.e.g.

Before,   Enter a four-digit number: 0000
After,   Enter a four-digit number: 1234

Question 08:

Write down the following programs, display the output, if there is an error in program then correct it.

    a. void main()
      { int a=b=c=10; a=b=c=50; printf("\n %d %d %d",a,b,c); }
    b. Void main ( ) { Double x=28; Int r; R= x%5; Printf ("\n r=%d", r); }
    c. Void main ( ) { Int I ; I=0x10+ 010+10; Printf ("\nx=%x", i); }
    d. Void main ( )
      { Printf ("\n ABC\b\b\bInfo World"); }