University of Mauritius
Faculty of Engineering
Department of Computer Science and Engineering
CSE 1003 – Computer Programming
2010/2011- Semester 2

Labsheet 9 (Lists)

Question 1
Write a program which allows input of data to a list and displays the list.

Question 2
Write a program which calculates and displays the sum of 2 equally long lists.

Question 3
Write a program which allows data entry to a list and displays the element in reverse order.

Question 4:
Write a program which accepts as input a list and displays the largest and smallest element in the list.

Question 5
Write a simple program which accepts a list of: Student Names, marks in Maths, and marks in Physics. The program should allow searching of a specific student and display his marks.
Hint:
student_Names=['Jim', 'Jack', 'Jill', 'Jane', ...]
marks_Maths=[70,30,56,78,. . . .]
marks_Physics=[90,56,89,70,. . . .]

marks_Maths[n] and marks_Physics[n] refer to the marks of student 'n' in Maths and Physics respectively.
e.g. Jim, (student_names[0]) scored 70 in Maths (marks_maths[0]) and 90 in Physics (marks_Physics[0])

Question 6
Write a program which checks if a list is symmetric, e.g. of a symmetric list is [a,b,c,d,c,b,a] or [a,b,b,a].

Question 7
Write a program which accepts as input a number of rows and a number of columns, and then creates a multi-dimensional list. The program should also display the elements in the list.

Question 8
There are two ways to display a 2-D list and these are row major and column major order. Consider the following 2-D list,

a	b	c	d
e	f	g	h
i	j	k	l

If we display in row major order, the results will be as follows: a b,c,d,e,f,g,h,i,j,k,l. Hoewever, if we display in column major order, the data will be a, e,i,b,f,j,c,g,k,d,h,l.

Write a program which allows data entry to a 2-D list and displays the elements in column major.