EEE 212-2
LAB 2

Part A. [30 points]

Write a program to accept an input string of 9 characters from the keypad and display them on the first row of the LCD screen based on the following table:

Input	Displayed
0-9	0-9
A	s
B	q
C	r
D	t
*	(
#	)

Part B [70 points]
Write a program to calculate the square-root of an integer ranging in [0,200). For this purpose, as an example, we input *sqrt(140)* which appears in the first row, and the result is displayed in the second row as 11.83 with 2 fractional digits displayed. The input will always have 9 characters, i.e. even if we input two digit or one digit numbers such as 53 or 4 they will be written as *sqrt(053)* and *sqrt(004).* You don't have to consider invalid inputs that are not in the form of *sqrt(XXX)*.

If the answer requires one digit only, display one digit. For example, if we input *sqrt(060)*, "*7.75*" should appear and not "*07.75*." Hence you should write your program accordingly.

Use the lookup table solution for this problem. The table for this question is provided to you on Moodle.