Assignment # 1

CSE356: Formal Methods

Question No. 1   [5 + 5 = 10 marks]

CLO: < 1 >; Bloom Taxonomy Level: <Understanding>

Write the pre- and post-conditions for the following design specifications.

a) The procedure *product* has three parameters *arr1, arr2,* and *arr3*. All the parameters are integer arrays with a range 1 … 50. The function of *product* is to multiply the corresponding elements of *arr1* and *arr2*, and place their product in the corresponding element of arr3. On entry to the *product* all the elements of *arr3* will be zero.

b) A procedure *search* has three parameters: *vals, searchfor*, and *found*. *vals* is an integer array with a range of 1….200. While *searchfor* is an integer parameter. If *searchfor* occurs in *vals* then *found* is set to one; otherwise, it is set to two.