SE115 – LAB#7 2014-2015 FALL

Aim: Practising pointers and arrays.

Part A. Write the following code:

```
#include <stdio.h>
int main()
{
     int x;
     printf("%d\n", &x);
     return 0;
}
```

Now, you have a 7 digit number on your screen. Note it down.
Let's say it is 2359156.

Modify the code given above and make it look like the code below:

```
#include <stdio.h>
int main()
{
     int x;
     printf("Enter a number: ");
     scanf("%d",  2359156);
     printf("Your number is: %d\n", x);
     return 0;
}
```

How did we do that without using `&x`?

For the next part of this lab work, try to access array elements without using subscript operator, [ ]. Remember that the name of an array is also its beginning address.

Part B. Write a main function that reads 10 double values from the user into a "double" array (main function fills the array using scanf). Then perform each following operation:

a) Print out the average of values in the array using such a function below:
void avgArray(double *array, int size);

b) Print out the maximum value in the array using such a function below:
void maxArray(double *array, int size);

c) Read a double value from the user, then search and print if it is involved in the array (Your function to search shall be declared with the prototype below):
int searchArray(double *array, int size, double keyElement);