

Note: Your answer should be **STRICTLY your own work. Suspicious similarities will be thoroughly checked and penalized.** By answering you will be accepting this statement:

"I pledge my honor, I did not receive or give any unauthorized assistance on this exam."

Q2.FinalQ2 (25 pts)

(Submission file name: FinalQ2.c)

Complete the below C program by writing a C function that sorts an array of integers using the following algorithm:

At each iteration i , the i^{th} item is swapped with the maximum of the unsorted part of the array that has $(N-i)$ items.

```
#include <stdio.h>
void EasySort (int arr[], int Size);

int main (){
int arr[10]={3,4,1,5,6,2,9,8,1,2};
EasySort();
for (i=0;i<10;i++) printf("\n %d",arr[i]);
return(1);
}

void EasySort (int arr[], int Size)
{

..

}
```

**Bonus: (10extra pts if runs almost perfectly,
0 otherwise)**

(Submission file name: FinalQ2bonus.c)

Write a program (by modifying the main function in part a) that generates 8 integers with unique random values between 1-25. These numbers should be stored in a static array (so that you can check whether or not the newly drawn random number was already drawn).

Once the random numbers are generated, your program should call the function **EasySort** to create a sorted order.

Then it should display the result as following. Instead of the number values, print a series of '*' characters. (E.g. "****" represents 3, "*****" represents 6, ...)

Example run:

```
./myprog.exe
*****
*****
*****
*****
*****
*****
*****
****
```