CS 1713
Introduction to Computer Programming II
Recitation 11

1. (100 pts) Consider the following code where an array of pointers is declared, memory is dynamically allocated so that each pointer points to an integer and random numbers are inserted into the integers.

```
int *info[100];
for (i=0; i<100; i++){
  info[i]=(int*)malloc(sizeof(int));
  *info[i]=rand()%1000;
}
```

With above setting, given an interval of size 50 starting at x as [x,x+50] (x and x+50 are included), find where to place this interval so that it has the maximum number of elements pointed by the array in it.

Consider the following simple example with array elements

```
6 11 9 2 4 7 14
```

With an interval of size 3 [x,x+3], placing the interval at x=6, [x=6,x+3=9] has the most number of elements in it since 3 elements (6,7 and 9) are in it.

Consider only intervals that start at a number in the set.

Sample output is given below

```
Maximum is 3 and it is for window [6,9]
```

Submit your program electronically using the blackboard system