Question-1 (9 marks)

Construct a program user give some numbers in random order. The program will continue to take input untill "P" is given. It will then rearrange the numbers by using insertion sort and is divided into two lines, the even and the odd numbers.

After that Find an element that is in the array list using Binary search.

Sample Input:

1 2 3 4 5 6 7 8 9 10

Output:

Even: 2 4 6 8 10

Odd: 1 3 5 7 9

Enter the Element you are looking for: 5

Found: 5 found in the odd list.

Number of Elements in the Odd list: 5

Number of Elements in the Even list: 5

Question-2 (6 marks)

Use Selection sort to sort this.

Sample Input: ok see u next time

Output: u ok see next time

Note: Small string length takes position before larger string

Question-3 (6 marks)

An user will take a pair of input every time and determine value greater whose sum of the digits are greater.

Input: 40 32

Output: 32 Greater.

In the quary 40 grater than 32 but the sum of digits of 32 = 5, greater than sum of digits of 40=4 (5>4)

Question-3 (6 marks)

Find this sequence,

Input: N=5

Output: 1 10 11 100 101 ….