

Lab3

SEP 05, 2023

INSTRUCTOR : JI LEE

Problem 1.

- ◆ Write a program to move all negative numbers of an array of 10 integers to the end of the array without changing the order of positive numbers and negative numbers (**you may use an extra array**).

```
int A[10] = {8, -5, -4, 2, 9, 10, -1, -7, 1, 6};
```

Original Data									
8	-5	-4	2	9	10	-1	-7	1	6
Result Data									
8	2	9	10	1	6	-5	-4	-1	-7

```
int A[10] = {-2, -5, 8, 7, 9, 3, 4, 2, 1, -7};
```

Original Data									
-2	-5	8	7	9	3	4	2	1	-7
Result Data									
8	7	9	3	4	2	1	-2	-5	-7

Problem 2.

- ◆ Write a program to fill the array (size 10) with random numbers between 1 and 15. Sort the array and remove the duplicate numbers (**Do not use an extra array**).

```

Original Data
-----
7 15 8 6 9 13 10 3 15 8

After Sorting
-----
3 6 7 8 8 9 10 13 15 15

After Removing Duplication
-----
3 6 7 8 9 10 13 15 0 0

```

```

Original Data
-----
12 4 3 11 9 7 4 3 2 12

After Sorting
-----
2 3 3 4 4 7 9 11 12 12

After Removing Duplication
-----
2 3 4 7 9 11 12 0 0 0

```

Problem 3.

- ◆ Write a code that fills the array of size 10 with **all different numbers** between 1 and 15 (1 and 15 are included).

```

10 7 11 15 8 6 14 4 13 1
More (y/n)? y
1 3 6 11 14 12 7 2 9 4
More (y/n)? y
9 7 8 5 3 12 10 11 6 2
More (y/n)? y
9 5 4 15 12 6 8 2 13 3
More (y/n)? n

```

```

13 5 4 11 8 14 2 9 1 12
More (y/n)? y
2 6 12 15 3 11 9 8 1 5
More (y/n)? y
9 1 12 6 8 15 2 5 10 11
More (y/n)? y
15 10 13 9 5 1 7 12 6 14
More (y/n)? y
4 1 9 13 11 7 14 6 15 3
More (y/n)? y
6 10 15 3 4 13 1 2 11 8
More (y/n)? n

```