Answers –lab sheet 5

- Question 1

```
************** MULTIPLICATION TABLE **************

        1       2       3       4       5       6       7       8       9       10
        ~       ~       ~       ~       ~       ~       ~       ~       ~       ~

1 >     1       2       3       4       5       6       7       8       9       10
     _____

2 >     2       4       6       8       10      12      14      16      18      20
     _____

3 >     3       6       9       12      15      18      21      24      27      30
     _____

4 >     4       8       12      16      20      24      28      32      36      40
     _____

5 >     5       10      15      20      25      30      35      40      45      50
     _____

6 >     6       12      18      24      30      36      42      48      54      60
     _____

7 >     7       14      21      28      35      42      49      56      63      70
     _____

8 >     8       16      24      32      40      48      56      64      72      80
     _____

9 >     9       18      27      36      45      54      63      72      81      90
     _____

10 >    10      20      30      40      50      60      70      80      90      100
     _____
```

- Question 2


```
Matrix 1
3        5        7
1        6        5
4        9        8

Matrix 2
6        0        2
4        7        1
7        2        1

Addition of Matrix 1 and Matrix 2
9        5        9
5        13       6
11       11       9

Subtraction of Matrix 1 and Matrix 2
-3       5        5
-3       -1       4
-3       7        7

Multiplication of Matrix 1 and Matrix 2
87       49       18
65       52       13
116      79       25
```

- Question 3


```
Total of the elements in the array = 855.26
Average of the elements in the array = 57.02
Minimum element in the array = 9.30
Maximum element in the array = 98.40
Element(s) which appears the maximum number of times in the array = {98.40}
```

- Question 4


```
Enter the score of student no 1 : 79
Enter the score of student no 2 : 91
Enter the score of student no 3 : 64
Enter the score of student no 4 : 51
Enter the score of student no 5 : 43

Grades of students

        student No 1 : B
        student No 2 : A
        student No 3 : C
        student No 4 : D
        student No 5 : F
```

- # Question 5

```
G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q5.exe

Enter element 1 : 1
Enter element 2 : 4
Enter element 3 : 6
Enter element 4 : 5
Enter element 5 : 1
Enter element 6 : 6
Enter element 7 : 9
Enter element 8 : 3
Enter element 9 : 5
Enter element 10 : 4

Distinct numbers in the list you entered : {1,4,6,5,9,3}
The number of distinct numbers in the list you entered : 6
```

- # Question 6

```
G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q6.exe

Enter element 1 : 18
Enter element 2 : 16
Enter element 3 : 50
Enter element 4 : 64
Enter element 5 : 2
Enter element 6 : 76
Enter element 7 : 42
Enter element 8 : 37
Enter element 9 : 81
Enter element 10 : 9

Unsorted array : {18 ,16 ,50 ,64 ,2 ,76 ,42 ,37 ,81 ,9 }
sorted array : {2 ,9 ,16 ,18 ,37 ,42 ,50 ,64 ,76 ,81 }
-------------------------------
Process exited after 69.74 seconds with return value 2
Press any key to continue . . . _
```

- Question 7

```
G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q7 .exe

Enter element 1 : 6.0
Enter element 2 : 4.4
Enter element 3 : 1.9
Enter element 4 : 2.9
Enter element 5 : 3.4
Enter element 6 : 2.9
Enter element 7 : 3.5
Enter element 8 : 2.3
Enter element 9 : 7.5
Enter element 10 : 4.8

Unsorted array : {6.0 ,4.4 ,1.9 ,2.9 ,3.4 ,2.9 ,3.5 ,2.3 ,7.5 ,4.8 }
sorted array : {1.9 ,2.3 ,2.9 ,2.9 ,3.4 ,3.5 ,4.4 ,4.8 ,6.0 ,7.5 }
-----------------------------------
Process exited after 38.95 seconds with return value 2
Press any key to continue . . .
```

- Question 8

```
G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q8 .exe

Enter the number 1:50
Enter the number 2:2
Enter the number 3:1
Enter the number 4:9
Enter the number 5:0

50,2,1,9,0 the largest possible number is 950210
--------------------------------
```

- Question 9

```
G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q9.exe

Enter the start value of range : 10
Enter the end value of range : 20
The number of 2s in given range of integers is 2
--------------------------------
```

- # Question 10

```
Enter a string : eat
resault : eating
```

```
Enter a string : string
resault : stringly
--------------------------------
```

- # Question 11

```
Enter your registration number : s/09/867

---------------------------VALIDATING REGISTRATION NUMBER : S/09/867----------------------------

Condition 01 : There are exactly 8 characters
                  The first condition satisfies

Condition 02 : First letter should be 'S'
                  The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                  The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                  The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                  The fifth condition satisfies

---------------------------THE REGISTRATION NUMBER IS VALID-----------------------------
```

```
Enter your registration number : E/08/465

---------------------------VALIDATING REGISTRATION NUMBER : E/08/465----------------------------

Condition 01 : There are exactly 8 characters
                  The first condition satisfies

Condition 02 : First letter should be 'S'
                  The second condition doesn't' satisfy : The first letter isn't 'S'

Condition 03 : There should be exactly two '/'s.
                  The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                  The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                  The fifth condition satisfies

---------------------------THE REGISTRATION NUMBER IS NOT VALID-----------------------------
```

```
Enter your registration number : S0967854

---------------------------VALIDATING REGISTRATION NUMBER : S0967854---------------------------------------

Condition 01 : There are exactly 8 characters
                        The first condition satisfies

Condition 02 : First letter should be 'S'
                        The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                        The third condition doesn't satisfy : There isn't 2 '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                        The forth condition doesn't satisfy : There isn't batch of student in between the two æ/Æs

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                        The fifth condition satisfies

---------------------------THE REGISTRATION NUMBER IS NOT VALID---------------------------------------
```

```
Enter your registration number : S/096/76

---------------------------VALIDATING REGISTRATION NUMBER : S/096/76---------------------------------------

Condition 01 : There are exactly 8 characters
                        The first condition satisfies

Condition 02 : First letter should be 'S'
                        The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                        The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                        The forth condition doesn't satisfy : There isn't batch of student in between the two æ/Æs

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                        The fifth condition doesn't satisfy : No integer representation

---------------------------THE REGISTRATION NUMBER IS NOT VALID---------------------------------------
```

```
Enter your registration number : S//09475

---------------------------VALIDATING REGISTRATION NUMBER : S//09475---------------------------------------

Condition 01 : There are exactly 8 characters
                        The first condition satisfies

Condition 02 : First letter should be 'S'
                        The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                        The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                        The forth condition doesn't satisfy : There isn't batch of student in between the two æ/Æs

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                        The fifth condition satisfies

---------------------------THE REGISTRATION NUMBER IS NOT VALID---------------------------------------
```

```
Enter your registration number : S//8/564

----------------------------VALIDATING REGISTRATION NUMBER : S//8/564----------------------------------

Condition 01 : There are exactly 8 characters
                       The first condition satisfies

Condition 02 : First letter should be 'S'
                       The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                       The third condition doesn't satisfy : There isn't 2 '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                       The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                       The fifth condition satisfies

----------------------------THE REGISTRATION NUMBER IS NOT VALID----------------------------------
```

```
Enter your registration number : S/0A/564

----------------------------VALIDATING REGISTRATION NUMBER : S/0A/564----------------------------------

Condition 01 : There are exactly 8 characters
                       The first condition satisfies

Condition 02 : First letter should be 'S'
                       The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                       The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                       The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                       The fifth condition satisfies

----------------------------THE REGISTRATION NUMBER IS VALID----------------------------------
```

```
Enter your registration number : S/A9/864

----------------------------VALIDATING REGISTRATION NUMBER : S/A9/864----------------------------------

Condition 01 : There are exactly 8 characters
                       The first condition satisfies

Condition 02 : First letter should be 'S'
                       The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                       The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                       The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                       The fifth condition satisfies

----------------------------THE REGISTRATION NUMBER IS VALID----------------------------------
```

```
Enter your registration number : S/09/67H

----------------------------VALIDATING REGISTRATION NUMBER : S/09/67H-------------------------------------

Condition 01 : There are exactly 8 characters
                         The first condition satisfies

Condition 02 : First letter should be 'S'
                         The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                         The third condition satisfies

Condition 04 : The year is represented by two digits in between two '/'s
                         The forth condition satisfies

Condition 05 : Last three digits immediately after the sencond slath represents the student number
                         The fifth condition doesn't satisfy : No integer representation

----------------------------THE REGISTRATION NUMBER IS NOT VALID-------------------------------------------
```

```
Enter your registration number : S@09H4N

----------------------------VALIDATING REGISTRATION NUMBER : S@09H4N----------------------------------------

Condition 01 : There are exactly 8 characters
                         The first condition doesn't satisfy : There isn't 8 characters

Condition 02 : First letter should be 'S'
                         The second condition satisfies

Condition 03 : There should be exactly two '/'s.
                         The third condition doesn't satisfy : There isn't 2 '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                         The forth condition doesn't satisfy : There isn't batch of student in between the two æ/Æs

Condition 05 : Last three digits immediately after the sencond slash represents the student number
                         The fifth condition doesn't satisfy : No integer representation

----------------------------THE REGISTRATION NUMBER IS NOT VALID-------------------------------------------
```

- Question 12

G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q12.exe

```
Enter the string : program
String in reverse order : margorp
-------------------------------
```

- Question 13

G:\UCSC 1st sem\SCS1202_2020\lab sheet 5\201151\201151_Q13.exe

```
Enter the parentheses : {15*(6+9)}
It is a balanced parentheses
-------------------------------
Enter the parentheses : {15*(9+6}
It is a unbalanced parentheses
-------------------------------
```

- Question 14

```
phrase : Cut your coat according to the cloth
There is word "cord" in this phrase(letter 17 to 20)
------------------------------
```