

Lab sheet 05

Q1

```
D:\1202 Programming c\Lab sheets\c\201180_Q1.exe

*****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

-----
Process exited after 0.3258 seconds with return value 0
Press any key to continue . . .
```

Q2

```
D:\1202 Programming c\Lab sheets\c\201180_Q2.e...

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

Materix 2:
6 0 2
4 7 1
7 2 1

Menu option
1.Addition
2.Subtraction
3.Multiplication

Enter your option : 1
09 05 09
05 13 06
11 11 09

-----
Process exited after 11.18 seconds with return value 0
Press any key to continue . . .
```

```
D:\1202 Programming c\Lab sheets\c\201180_Q2.e...

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

Materix 2:
6 0 2
4 7 1
7 2 1

Menu option
1.Addition
2.Subtraction
3.Multiplication

Enter your option : 2

1.Matrix1-Matrix2
2.Matrix2-Matrix1
Enter your option :1

-3 5 5
-3 -1 4
-3 7 7

-----
```

```

D:\1202 Programming c\Lab sheets\c\201180_Q2...
Matrix 1:
3 5 7
1 6 5
4 9 8

Materix 2:
6 0 2
4 7 1
7 2 1

Menu option
1.Addition
2.Subtraction
3.Multiplication

Enter your option : 3

1.Matrix1*Matrix2
2.Matrix2*Matrix1
Enter your option :1

087 049 018
065 052 013
116 079 025

-----
Process exited after 5.043 seconds with return value 0
Press any key to continue . . .

```

Q3

a)

```

D:\1202 Programming c\Lab sheets\c\201180_Q3.exe
Menu of options :
1.Total of the elements
2.Average of the elements
3.Minimun Element of the array
4.Maximun Element of the array
5.Most appeared Number in the array

Enter your option :1

Total of the elements in the array is 855.260071
-----
Process exited after 2.366 seconds with return value 0
Press any key to continue . . .

```

b)

```

D:\1202 Programming c\Lab sheets\c\201180_Q3.exe
Menu of options :
1.Total of the elements
2.Average of the elements
3.Minimun Element of the array
4.Maximun Element of the array
5.Most appeared Number in the array

Enter your option :2

Average of the elements in the array is 57.017338
-----
Process exited after 2.032 seconds with return value 0
Press any key to continue . . .

```

c)

```
D:\1202 Programming c\Lab sheets\c\201180_Q3.exe
Menu of options :
1.Total of the elements
2.Average of the elements
3.Minimun Element of the array
4.Maximun Element of the array
5.Most appeared Number in the array

Enter your option :3

Minimun element of the array is 9.3
-----
Process exited after 1.666 seconds with return value 0
Press any key to continue . . .
```

d)

```
D:\1202 Programming c\Lab sheets\c\201180_Q3.exe
Menu of options :
1.Total of the elements
2.Average of the elements
3.Minimun Element of the array
4.Maximun Element of the array
5.Most appeared Number in the array

Enter your option :4

Maximum element of the array is 98.4
-----
Process exited after 1.034 seconds with return value 0
Press any key to continue . . .
```

e)

```
D:\1202 Programming c\Lab sheets\c\201180_Q3.exe
Menu of options :
1.Total of the elements
2.Average of the elements
3.Minimun Element of the array
4.Maximun Element of the array
5.Most appeared Number in the array

Enter your option :5

The mode of the array is 98.4
-----
Process exited after 4.167 seconds with return value 0
Press any key to continue . . .
```

Q4

```
D:\1202 Programming c\Lab sheets\c\201180_Q4.exe

Enter the scores of five students
    Score of 1 student : 67
    Score of 2 student : 90
    Score of 3 student : 76
    Score of 4 student : 54
    Score of 5 student : 32

The best score is : 90

The grade of the 1 student is : C
The grade of the 2 student is : A
The grade of the 3 student is : B
The grade of the 4 student is : D
The grade of the 5 student is : F
-----
Process exited after 15.65 seconds with return value 0
Press any key to continue . . .
```

Q5

```
D:\1202 Programming c\Lab sheets\c\201180_Q5.exe

Enter your ten numbers :
12 7 7 45 2 10 4 5 10 10

The distinct elements are : 12 7 45 2 10 4 5
The no of distinct elements is : 7
-----
Process exited after 27.6 seconds with return value 0
Press any key to continue . . .
```

Q6

```
D:\1202 Programming c\Lab sheets\c\201180_Q6.exe

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

The sorted number list is:
1 2 3 4 5 6 7 8 9 10
-----
Process exited after 12.3 seconds with return value 0
Press any key to continue . . .
```

Q7

```
D:\1202 Programming c\Lab sheets\c\201180_Q7.exe

Enter your numberts to be sorted :
6.0 4.4 1.9 2.9 3.4 2.9 3.5 2.3 7.5 4.8

The 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 50.08 seconds with return value 0
Press any key to continue . . .
```

Q8

```
D:\1202 Programming c\Lab sheets\c\201180_Q8.exe

Enter your 05 integers :
50 2 1 9 0

The largest possible number from above integers is : 950210
-----
Process exited after 9.898 seconds with return value 0
Press any key to continue . . .
```

Q9

```
D:\1202 Programming c\Lab sheets\c\20180_Q9.exe

Enter your number of integers in your number range :11

Enter the numbers in the range :
10 11 12 13 14 15 16 17 18 19 20

No of 2's in given range is : 2
-----
Process exited after 15.01 seconds with return value 0
Press any key to continue . . .
```

Q10

```
D:\1202 Programming c\Lab sheets\c\201180_Q10.exe

Enter your string : eat
eating
-----
Process exited after 4.09 seconds with return value 0
Press any key to continue . . .
```

```
D:\1202 Programming c\Lab sheets\c\201180_Q10.exe

Enter your string : sing
singly
-----
Process exited after 4.088 seconds with return value 0
Press any key to continue . . .
```

```
D:\1202 Programming c\Lab sheets\c\201180_Q10.exe

Enter your string : go
go
-----
Process exited after 8.612 seconds with return value 0
Press any key to continue . . .
```

Q11

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition satisfies

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character should be 'S'
                The second condition does not satisfies : First character is not '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 fourth condition satisfies

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

-----VALIDATING REGISTRATION NUMBER : S0967854

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

Condition 02 : The first character should be 'S'
                The second condition satisfies

Condition 03 : There should be exactly two '/'s
                The third condition does not satisfies : there are no exactly two '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                The fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition does not satisfies : No integer representation

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition does not satisfies : No integer representation

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

Condition 01 : There are exactly 8 characters
                The first condition does not satisfies

Condition 02 : The first character should be 'S'
                The second condition satisfies

Condition 03 : There should be exactly two '/'s
                The third condition does not satisfies : there are no exactly two '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                The fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition satisfies

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

```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

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

Condition 02 : The first character 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 fourth condition satisfies

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition does not satisfies : No integer representation

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



```
D:\1202 Programming c\Lab sheets\c\201180_Q11.exe

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

Condition 01 : There are exactly 8 characters
                The first condition does not satisfies

Condition 02 : The first character should be 'S'
                The second condition satisfies

Condition 03 : There should be exactly two '/'s
                The third condition does not satisfies : there are no exactly two '/'s

Condition 04 : The year is represented by two digits in between two '/'s
                The fourth condition does not satisfies : two digits are not in between two '/'s

Condition 05 : Last three integers immediately after second slash represent the student number
                The fifth condition does not satisfies : No integer representation

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

Q12

```
D:\1202 Programming c\Lab sheets\c\201180_Q12.exe

Enter your string : LASANTHI

The reverse of your string is : IHTNASAL

-----
Process exited after 6.553 seconds with return value 0
Press any key to continue . . .
```

Q13

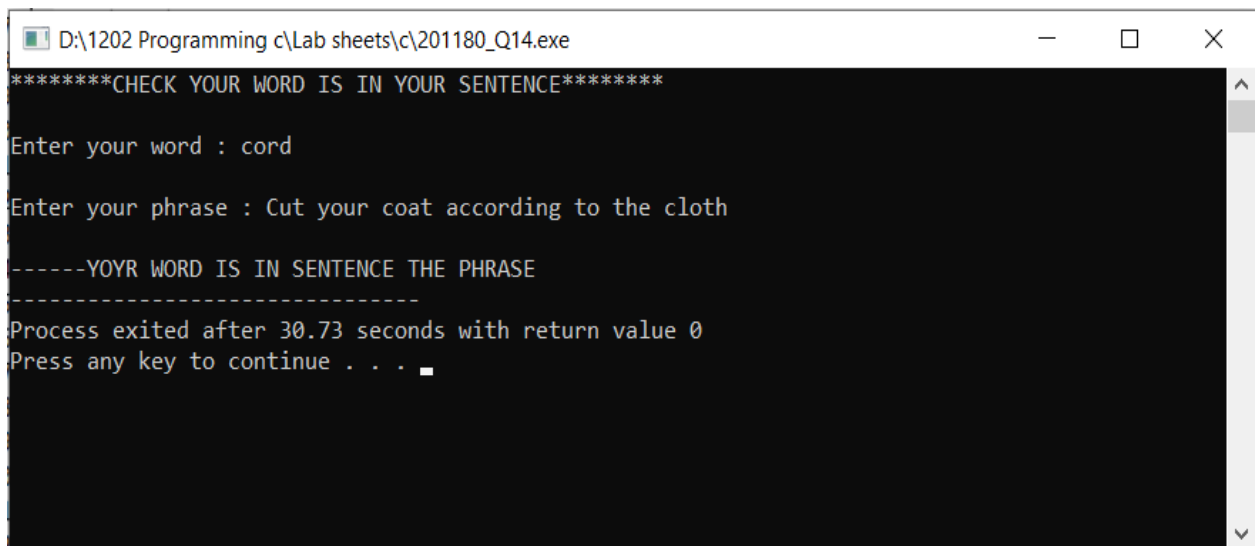
```
D:\1202 Programming c\Lab sheets\c\201180_Q13.exe

Enter your string : [{(1+2)*5}/7]

Valid Expression

-----
Process exited after 34.43 seconds with return value 0
Press any key to continue . . .
```

Q14



A screenshot of a Windows command prompt window. The title bar shows the file path "D:\1202 Programming c\Lab sheets\c\201180_Q14.exe". The window has standard Windows window controls (minimize, maximize, close). The command prompt displays the following text:

```
*****CHECK YOUR WORD IS IN YOUR SENTENCE*****  
Enter your word : cord  
Enter your phrase : Cut your coat according to the cloth  
-----YOYR WORD IS IN SENTENCE THE PHRASE  
-----  
Process exited after 30.73 seconds with return value 0  
Press any key to continue . . .
```