

חלק ב

Screenshots

```
Please Enter 7 digit binary number:
1010101
Please Enter 7 digit binary number:
1110000
Please Enter 7 digit binary number:
0001110
Please Enter 7 digit binary number:
1111111
The decimal numbers in descending order are:
127 112 85 14
the average in decimal is: 84.5
the longest series of ones is: 7 from the binary number: 1111111
The number of changes between 0 and 1 for each binary number is:
number of changes: 6 for binary number: 1010101
number of changes: 1 for binary number: 1110000
number of changes: 2 for binary number: 0001110
number of changes: 0 for binary number: 1111111
the largest number of ones is: 7 from the binary number: 1111111
the total number of ones in the set is: 17
```

```
Please Enter 7 digit binary number:
0000000
Please Enter 7 digit binary number:
1000001
Please Enter 7 digit binary number:
0111110
Please Enter 7 digit binary number:
1011011
The decimal numbers in descending order are:
91 65 62 0
the average in decimal is: 54.5
the longest series of ones is: 5 from the binary number: 0111110
The number of changes between 0 and 1 for each binary number is:
number of changes: 0 for binary number: 0000000
number of changes: 2 for binary number: 1000001
number of changes: 2 for binary number: 0111110
number of changes: 4 for binary number: 1011011
the largest number of ones is: 5 from the binary number: 0111110
the total number of ones in the set is: 12
```

.1

```
Please Enter 7 digit binary number:
0101010
Please Enter 7 digit binary number:
1010101
Please Enter 7 digit binary number:
1100110
Please Enter 7 digit binary number:
0011001
The decimal numbers in descending order are:
102 85 42 25
the average in decimal is: 63.5
the longest series of ones is: 2 from the binary number: 1100110
The number of changes between 0 and 1 for each binary number is:
number of changes: 6 for binary number: 0101010
number of changes: 6 for binary number: 1010101
number of changes: 3 for binary number: 1100110
number of changes: 3 for binary number: 0011001
the largest number of ones is: 4 from the binary number: 1010101
the total number of ones in the set is: 14
```

```
Please Enter 7 digit binary number:
0101010
Please Enter 7 digit binary number:
1010101
Please Enter 7 digit binary number:
1100110
Please Enter 7 digit binary number:
0011001
The decimal numbers in descending order are:
102 85 42 25
the average in decimal is: 63.5
the longest series of ones is: 2 from the binary number: 1100110
The number of changes between 0 and 1 for each binary number is:
number of changes: 6 for binary number: 0101010
number of changes: 6 for binary number: 1010101
number of changes: 3 for binary number: 1100110
number of changes: 3 for binary number: 0011001
the largest number of ones is: 4 from the binary number: 1010101
the total number of ones in the set is: 14
```

3. עץ מספרים דינאמי

```
Microsoft Visual Studio Debug Console
Enter a number between 4 and 15:
4
A      1
B    2 3 4
C    |5|
D    |5|
```

```
Microsoft Visual Studio Debug Console
Enter a number between 4 and 15:
8
A          1
B        2 3 4
C      5 6 7 8 9
D    1 2 3 4 5 6 7
E  8 9 1 2 3 4 5 6 7
F 8 9 1 2 3 4 5 6 7 8 9
G      |1|
H      |1|
```

```
Microsoft Visual Studio Debug Console
Enter a number between 4 and 15:
9
A          1
B        2 3 4
C      5 6 7 8 9
D    1 2 3 4 5 6 7
E  8 9 1 2 3 4 5 6 7
F 8 9 1 2 3 4 5 6 7 8 9
G 1 2 3 4 5 6 7 8 9 1 2 3 4
H      |5|
I      |5|
```

```
Microsoft Visual Studio Debug Console
Enter a string with exactly 12 characters:
aBcDeFgHiJkL
String is not a palindrome.
String is not a number.
There are 6 uppercase letters in string.
String is built in alphabetical order!
```

```
Microsoft Visual Studio Debug Console
Enter a string with exactly 12 characters:
123123123123
String is not a palindrome.
String is divided by 3.
String isn't built out of english letters only.
```

```
Microsoft Visual Studio Debug Console
Enter a string with exactly 12 characters:
aBCCBaABCCBa
String is a palindrome!
String is not a number.
There are 9 uppercase letters in string.
String isn't built in alphabetical order.
```

```
Microsoft Visual Studio Debug Console
Enter a string with exactly 12 characters:
123451234512345
Input must be exactly 12 characters long. Try again:
122345543221
String is a palindrome!
String is not divided by 3.
String isn't built out of english letters only.
```

```
Microsoft Visual Studio Debug Console
Enter a string with exactly 12 characters:
CourseCSharp
String is not a palindrome.
String is not a number.
There are 3 uppercase letters in string.
String isn't built in alphabetical order.
```

Please enter number with 8 digits:

31415926

Number Details:

the left digit: 3 number of digits smaller than it: 3

number of digits divided by 3 without remainder: 3

difference between largest and smallest digit: 8

the digit with the most appearances: 1 with 2 appearances

Please enter number with 8 digits:

12233345

Number Details:

the left digit: 1 number of digits smaller than it: 0

number of digits divided by 3 without remainder: 3

difference between largest and smallest digit: 4

the digit with the most appearances: 3 with 3 appearances

Please enter number with 8 digits:

00770088

Number Details:

the left digit: 0 number of digits smaller than it: 0

number of digits divided by 3 without remainder: 4

difference between largest and smallest digit: 8

the digit with the most appearances: 0 with 4 appearances

Please enter number with 8 digits:

90001357

Number Details:

the left digit: 9 number of digits smaller than it: 7

number of digits divided by 3 without remainder: 5

difference between largest and smallest digit: 9

the digit with the most appearances: 0 with 3 appearances