מטלה 1

חלק 1 – פתרונות

1. כן.
כן.
כל קובץ אשר עובר קימפול, מתקמפל לקובץ exe או dll אשר מכילים בתוכם את ה-Net Assembly., אך קבצי exe
מכילים בתוכם בנוסף גם Net PE. ולכן קובץ ה-exe הוא גם Net Assembly. וגם Net PE. .

a. A23_Ex01

b. 23:1:1:20760

c. Manifest

d. mscorlib   2:0:0:0

System.Xml   2:0:0:0

2.

Type (Struct/Class/Enum)	Name	Members (methods, fields)
Class	DemosLauncher	private enum eUserChoice public class Demos public static void Run() private static void displayMenuOptions() private static eUserChoice retrieveUserSelection() private static bool checkUserCredentials()
enum	eUserChoice	Exit, BinaryInput, SandMachine
Class	Demos	public static void RunSandMachineProgram() private static void drawSandMachine(int) private static int buildLine(StringBuilder, int, int) public static void RunBinaryInput() private static bool checkIfDescendingSeries(string) private static bool checkIfAscendingSeries(string) private static string getInputFromUser(out int)
Class	Program	public static void Main()

3. User name: C-Sharp
Password: HIT23A

חלק 2 – צילומי מסך

```
Please enter three 8 digit binary numbers:
01000000
01111011
01111001
The numbers in descending order are: 123, 121, 64
The average number of zeroes is: 4.00
The average number of ones is: 4.00
The number of numbers that their digits are a descending series is: 1
The number of numbers that can be divided by 4 is: 1
The number of palindroms is: 1

Press enter to exit...
```

```
Please enter three 8 digit binary numbers:
00000001
00000010
00000011
The numbers in descending order are: 3, 2, 1
The average number of zeroes is: 6.67
The average number of ones is: 1.33
The number of numbers that their digits are a descending series is: 3
The number of numbers that can be divided by 4 is: 0
The number of palindroms is: 3

Press enter to exit...
```

```
Please enter three 8 digit binary numbers:
0010100101
The input you entered is invalid. Please try again.
8828
The input you entered is invalid. Please try again.
aaaaaaaaaa
The input you entered is invalid. Please try again.
00100101
10000011
00000100
The numbers in descending order are: 131, 37, 4
The average number of zeroes is: 5.67
The average number of ones is: 2.33
The number of numbers that their digits are a descending series is: 1
The number of numbers that can be divided by 4 is: 1
The number of palindroms is: 2

Press enter to exit...
```

```
     *
    ***
   *****
  *******
 *********
  *******
   *****
    ***
     *
Press enter to exit...
```

```
Please enter diamond height:
4
  *
 ***
*****
 ***
  *

Press enter to exit...
```

```
Please enter diamond height:
5
  *
 ***
*****
 ***
  *

Press enter to exit...
```

```
Please enter diamond height:
7
   *
  ***
 *****
*******
 *****
  ***
   *

Press enter to exit...
```

```
Please enter diamond height:
8
    *
   ***
  *****
 *******
*********
 *******
  *****
   ***
    *

Press enter to exit...
```

```
Please enter a string of 6 characters (needs to contain only uppercase letters, only lowercase letters or only numbers):

4er5er
Invalid input, try again:
AABBAA
Is palindrom?: True
Not a number
The number of uppercase letters is: 6

Press enter to exit...
```

```
Please enter 6 digit integer:
000123
There Are 0 digits that are higher than the units digit
The lowest digit is: 0
There are 4 digits that can be divided by 3
The average of digits is: 1.00

Press enter to exit...
```