Data Structures HW2

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There are 3 wrong examples in the description: For 259, -1, -128 values the results will be shown as follows:

259, (000000100000011): 0'lar fazladir. Ek 10 adet 1 gereklidir.

- -1, (11111111): 1'ler fazladir. Ek 8 adet 0 gereklidir.
- -128, (10000000): 0'lar fazladir. Ek6adet 1 gereklidir.

Examples:

```
Enter an integer: 15
                                                                            Enter an integer: 1
Value: 0 is pushed to the stack.
                                                                            Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
STACK:
iøi
                                                                            STACK:
|0|
|0|
|0|
|0|
|0|
|0|
|0|
|0|
|0|
The popped value: 0
101
101
The popped value: 0
The popped value: 0
The popped value: 0
The popped value: 0
Binary Representation: 00001111
                                                                            Binary Representation: 00000001
*** 0'lar fazladir. Ek 6 adet 1 gereklidir. ***
*** 0 ve 1'ler eşit sayidadir. ***
```

Figure 1 Example 1: "15"

Figure 2 Example 2: "1"

```
Enter an integer: 259
Value: 0 is pushed to the stack.
Value: 1 is pushed to
Value: 1 is
```

STACK:
Value: 1 is pushed to the stack.
Binary Representation: 111111111
**** 1'ler fazladir. Ek 8 adet 0 gereklidir. ***

Figure 4 Example 4: "-1"

Figure 3 Example 3: "259"

```
Enter an integer: -128
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
                                                                  Enter an integer: 85
                                                                  Value: 0 is pushed to the stack.
                                                                  Value: 0 is pushed to the stack.
                                                                  Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
                                                                  Value: 0 is pushed to the stack.
                                                                  STACK:
                                                                  |0|
STACK:
                                                                  |0|
|0|
|0|
|0|
|0|
|0|
                                                                  jøj
                                                                  The popped value: 0
                                                                  The popped value: 0
                                                                  The popped value: 0
0
                                                                  The popped value: 0
    popped value: 0
Binary Representation: 10000000 *** 0'lar fazladir. Ek 6 adet 1 gereklidir. ***
                                                                  Binary Representation: 01010101
                                                                  *** 0 ve 1'ler eşit sayidadir. ***
```

Figure 5 Example 5: "-128"

Figure 6 Example 6: "85"

```
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
                                                                                                                                                                   Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
 Enter an integer: 8388607
Value: 0 is pushed to the stack.
                                                                                                                                                                   Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
   |0|
 The popped value: 0
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
                                                                                                                                                                   Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 0 is pushed to the stack.
Value: 1 is pushed to the stack.
                                                                                                                                                                    Value: 0 is pushed to the stack.
                                                                                                                                                                   STACK:
                                                                                                                                                                   | 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
| 0 |
 Value: 1 is pushed to the stack.
 Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
 Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
Value: 1 is pushed to the stack.
                                                                                                                                                                    The popped value: 0
                                                                                                                                                                    The popped value:
                                                                                                                                                                    The popped value:
                                                                                                                                                                    The popped value:
 The popped value:
                                                                                                                                                                    The popped value:
The popped value:
The popped value:
              Figure 7 Example 7: "-8388607"
                                                                                                                                                                    The popped value: 0
```

Enter an integer: -900000

Figure 8 Example 8: "-900000"

Binary Representation: 111100100100010001100000 *** 0'lar fazladir. Ek 6 adet 1 gereklidir. ***