CCSC:MW 2021 Programming Competition

Highest I sum

An *I* in a 6 by 6 array is a subset of values with indices following the *I* pattern in the graphical representation of the array (shown below is a 6 by 6 array and *I* pattern):

 $1\; 1\; 1\; 0\; 0\; 0$

010000

111000

 $0 \ 0 \ 0 \ 0 \ 0$

00000

 $0 \ 0 \ 0 \ 0 \ 0$

abc

d

e f g

111

1

111

There are 16 *I*'s in a 6 by 6 matrix. An *I sum* is the sum of the values of the indices that form an *I*. Calculate the *I* sum for every *I* in the 6 by 6 matrix, then print the highest (maximum) *I* sum. Please consider that the size of the array is fixed to be 6 by 6.

Example

-9 -9 -9 111

0 -9 0 432

-9 -9 -9 123

0 0 8 6 6 0

0 0 0 -2 0 0

0 0 1 2 4 0

The *I* sums are:

```
-63, -34, -9, 12,
-10, 0, 28, 23,
-27, -11, -2, 10,
9, 17, 25, 18
```

The highest *I* sum is 28 from the *I* beginning at second row, third column:

0 4 3

866

Input

input values for the 6 by 6 matrix. Please note the values can only be single digit [-9, 9].

Output

Print the highest (maximum) I sum.

Example 1

111000

 $0 \; 1 \; 0 \; 0 \; 0 \; 0 \\$

111000

 $0\ 0\ 0\ 0\ 0\ 0$

 $0\ 0\ 0\ 0\ 0\ 0$

 $0 \ 0 \ 0 \ 0 \ 0$

The following is the correct output for the input above:

7