

Popular Convolution Filters #4

You are provided with the kernels of six popular convolution filters. Which of these filters will detect only vertical edges?

Only enter the integer corresponding to the appropriate filter (1 – 6) in the text box. Do not leave any leading or trailing spaces or newlines.

1

```
0 0 0
0 1 0
0 0 0
```

2

```
-1 -1 -1
-1 8 -1
-1 -1 -1
```

3

```
0 -1 0
-1 5 -1
0 -1 0
```

4

```
1/16 1/8 1/16
1/8 1/4 1/8
1/16 1/8 1/16
```

5

```
-1 0 1
-2 0 2
-1 0 1
```

6

```
-1 -2 -1
0 0 0
1 2 1
```