

```
// initialize table with random two-digit numbers
const int ROWS = 5;
const int COLS = 7;
const int WIDTH = 4;
Table<int> t(ROWS, COLS);
randomize(t, 10, 99);
cout << setw(WIDTH) << t << endl;
```

51	27	44	50	99	74	58
28	62	84	45	75	71	97
71	51	35	72	67	46	91
34	42	73	32	62	61	96
18	15	57	46	21	28	79

```
// replace odd numbers in table with zero
for (int i = 0; i < ROWS; i++) {
    for (int j = 0; j < COLS; j++) {
        if (t(i, j) % 2 == 1) {
            t(i, j) = 0;
        }
    }
}
cout << setw(WIDTH) << t << endl;
```

0	0	44	50	0	74	58
28	62	84	0	0	0	0
0	0	0	72	0	46	0
34	42	0	32	62	0	96
18	0	0	46	0	28	0

```
// append 3 columns fill with -1
Table<int> t2(ROWS, 3);
fill(t2, -1);
t = t.append_cols(t2);
cout << setw(WIDTH) << t << endl;
```

0	0	44	50	0	74	58	-1	-1	-1
28	62	84	0	0	0	0	-1	-1	-1
0	0	0	72	0	46	0	-1	-1	-1
34	42	0	32	62	0	96	-1	-1	-1
18	0	0	46	0	28	0	-1	-1	-1

```
// append 2 rows filled with -2
Table<int> t3(2, t.get_cols());
fill(t3, -2);
t = t.append_rows(t3);
cout << setw(WIDTH) << t << endl;
```

0	0	44	50	0	74	58	-1	-1	-1
28	62	84	0	0	0	0	-1	-1	-1
0	0	0	72	0	46	0	-1	-1	-1
34	42	0	32	62	0	96	-1	-1	-1
18	0	0	46	0	28	0	-1	-1	-1
-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
-2	-2	-2	-2	-2	-2	-2	-2	-2	-2

```
// extract a subtable
t = t(3, 5, 5, 7);
cout << setw(WIDTH) << t << endl;
```

```
// square the entries in the table
cout << setw(WIDTH) << t + square << endl;

return 0;
```

0	96	-1
28	0	-1
-2	-2	-2

0	9216	1
784	0	1
4	4	4