



# Rectangle Drawer

Write a C++ program that draws rectangles.

The user should be asked to enter a length (between 1 and 20).

The user should be asked to enter a width (between 1 and 20).

The program should then "draw" the rectangle using the character X.

This should be accomplished using a nested "for" loop.

Below the rectangle, the program should output the perimeter and surface area of the rectangle.

## Example.

```
Length = 10  
width = 4
```

```
XXXXXXXXXX  
XXXXXXXXXX  
XXXXXXXXXX  
XXXXXXXXXX
```

```
A 10 by 4 rectangle has a perimeter of 28 units.  
A 10 by 4 rectangle has a surface area of 40 units^2.
```

## Challenge 1 - Draw a rectangle that is not filled in ...

```
Length = 10  
width = 4
```

```
XXXXXXXXXX  
X          X  
X          X  
XXXXXXXXXX
```

```
A 10 by 4 rectangle has a perimeter of 28 units.  
A 10 by 4 rectangle has a surface area of 40 units^2.
```

## Challenge 2 - In the final line, display ...

```
A 10 by 4 rectangle has a surface area of 40 units^2.
```

Hint: The ASCII Code for the <sup>2</sup> character is 253.