

Shapes Program

Create a program that allows the user to choose a shape/pattern (from the list below). The user must then be able to select the size of the shape (between 0 and 20), before the application prints the pattern (of the chosen size) to the console window.

(A)	(B)	(C)	(D)
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Code Hints:

To be able to complete this program, the correct use of nested iteration (loops) is required. Use either the **For/Next** loop and/or the **Do While/Until** loop to achieve this. Consider the following code hints before attempting the application:

Use **one loop** with the following code to produce the height of a pattern:

```
For X = 1 To 10
    WriteLine()
    'Insert other code here
Next X
```

Use **another loop, inside** the previous loop, to produce the width of a pattern; for example:

```
'Start of another LOOP
For Y = 1 To 10
    Write("*")
Next Y
'End of another LOOP
```

Note: 'Write ("*")' will cause the asterisks to be printed side by side as opposed to being printed on a new line.

Pattern D requires each line to be started with the appropriate number of blank spaces. This can be achieved using the following code:

```
Write(Space(5))
```

Super-Super-Hard Part:

WARNING: Due to the extreme nature and excruciating difficulty of this task, it should only be undertaken by trained professionals and/or superhuman 'whizz-kids'. Please be advised that this activity poses a serious health risk (risk of dehydration, severe headaches and in some cases, dizziness) and therefore should only be attempted at your own risk!

Add a fifth shape/pattern choice (shown below) to your application. The user should be able to choose the size of the pattern (3 to 20), before the application prints the pattern (of the chosen size) to the console window.

Note: the size of this pattern is determined by the number of rows to the middle point; for example, the size of this diamond is 6.

