Review Questions
Functions

Q1. Define a function `circle_area` that takes an integer parameter `r` as the radius of a circle and returns the area of that circle rounded to 2 decimal places.

In the main program, take `r` as input and call the function inside a print statement.

Make sure to import the math module and use `math.pi` to access the value of pi.

Sample Input:
```
11
```

Sample Output:
```
380.13
```

Q2. Write a function, quadratic_roots() , that takes a, b, and c as parameters and prints the 2 roots of the following quadratic equation:

$ax^2 + bx + c = 0$

In the main program, take `a`, `b` and `c` as input on separate lines and call the function.

Calculation:

Smaller root = $\frac{-b - \sqrt{b^2 - 4ac}}{2a}$

Larger root = $\frac{-b + \sqrt{b^2 - 4ac}}{2a}$

Sample Input:

```
1
5
6
```

Sample Output:

```
-3.0, -2.0
```

Q3. A 4 digit number has 1 digit each in the thousands, hundreds, tens, and units position. For example, 5327 has 5 in the thousands position, 3 in the hundreds position, 2 in the tens position, and 7 in the units position.

Write a function, breakdown() , whose parameter, num4 , is a 4 digit number represented as an integer and which prints the digits in each of the positions.

In the main program, take `num4` as input and call the function.

Sample Input:

```
5327
```

Sample Output:

```
Thousands: 5
Hundreds: 3
Tens: 2
Units: 7
```

Q4. Write a program that draws the shapes of a square and rectangle with a specified character. The user enters the character to be used along with the size of the shape.

For squares, each character in a line should be separated by a space. The number of characters in the 1st and last line are equal to the size of the shape. The number of lines equals the size of the shape.

Example for size 5:

```
* * * * *
*       *
*       *
*       *
* * * * *
```

For rectangles, width (horizontal) is the same as that of a square. Height is half the size (rounded up if decimal).

Example for size 5:
5/2 = 2.5 -> 3

```
* * * * *
*       *
* * * * *
```

Break the program into 2 functions named square and rectangle that prints the respective shape.

In the main program, take `character` and `size` as input on separate lines and call the functions.