

## Chapter 5 Dave's Dice Game

Time required: 90 minutes

- Comment each line of code as shown in the tutorials and other code examples.
- Follow all directions carefully and accurately.
- Think of the directions as minimum requirements.

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### Pseudocode

1. Write pseudocode for the exercise
2. Save it in a document
3. Submit with the assignment

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### Requirements

Dave is taking a statistics class at WNCN. His assignment is to simulate the rolling of two dice by randomly generating a 1 through 6. He would like you to write a dice game.

When the user rolls the dice:

- Display two random numbers in the range 1-6.
- Ask the user to play again.

### die.py

1. Create a module/program called **die.py**.
2. Create a function named **roll()** that rolls a random die
3. The function returns an integer value.

### dice\_game.py

1. Create a new program named **dice\_game.py**.
2. Import the **die** module.
3. Import and use the **print\_title** module. Print a creative title for the program.
4. When you wish to roll the dice, call the **.roll()** function.
5. Determine and display which die is the highest: the winner.

6. Track the statistics of wins out of rolls.
7. Ask the user if they want to roll again.

Example run:

```
+-----+
|  Time to Roll the DICE!  |
+-----+

Rolling the dice...
Their values are:
Die1: 5
Die2: 1
Die1 wins!
Die1 has won 1 out of 1
Roll them again? (y = yes): y
Rolling the dice...
Their values are:
Die1: 4
Die2: 4
Tie
Die1 has won 1 out of 2
Roll them again? (y = yes): |
```

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## Challenge

Look up the `time.sleep()` Python function to give the game a bit of suspense while the die are rolling. You can randomize the sleep function to randomize how long the dice roll.

```
+-----+
|  Time to Roll the DICE!  |
+-----+
Rolling the dice...
```

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## Extra Credit

How about some ascii art dice?

```
+-----+
|  Time to Roll the DICE!  |
+-----+
Rolling the dice...
Their values are:
Die1: 6
+-----+
| o  o |
| o  o |
| o  o |
+-----+

Die2: 4
+-----+
| o  o |
|   |
| o  o |
+-----+

Die1 wins!
Die1 won 1 out of 1
Roll them again? (y = yes, Enter to exit):
Thanks for Playing!
```

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## Assignment Submission

1. Attach the pseudocode.
2. Attach the program files.
3. Attach screenshots showing the successful operation of the program.
4. Submit in Blackboard.