

Python: More functions

1. Write a function to count the frequency of different characters within a text string. Then write a program to print the frequency for each of the vowels.
2. Write a function to simulate the game of beetle. Then write a program to play 100 games and calculate the average number of dice rolls need to complete the game.

The rules of the game of beetle are:

- A six-sided die is used.
- A six must be thrown to draw a body.
- A five must be thrown to draw a head. A head cannot be drawn unless a body has been drawn.
- A four must be thrown to draw a wing. A wing cannot be drawn unless a body has been drawn.
- A three must be thrown to draw a leg. A leg cannot be drawn unless a body has been drawn.
- A one must be thrown to draw an eye. An eye cannot be drawn unless a head has been drawn.
- A two must be thrown to draw an antenna. An antenna cannot be drawn unless a head has been drawn.
- A beetle is complete when one head, two wings, six legs, a head, two eyes and two antennae have been drawn. The game ends when the beetle is complete.
- Additional body members beyond those required are not drawn.

The parts of a beetle are illustrated in Figure 1.

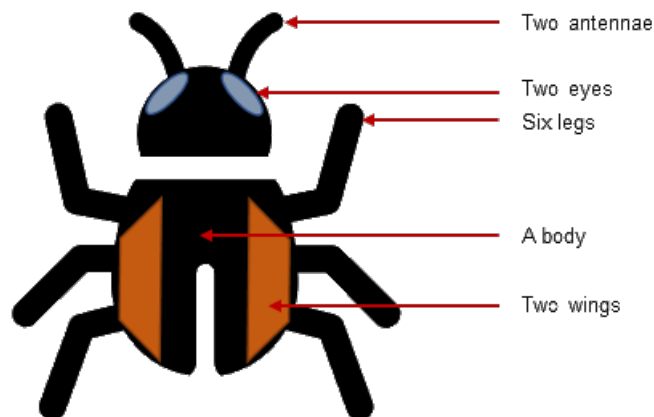


Figure 1: The structure of a beetle for the beetle game.