Question 1.
Write a function, `impactTime`, which calculates the total time a projectile will take from launch to impact. The function should take in a float `vel` for initial velocity and a float `angle` for the launch angle. The equation for calculating the time is $\frac{2v_0 \sin\theta}{g}$. (assume gravity is -9.8 and the angle is in radians) The function should return a float.

Question 2.
Convert the following `while` loop into a `for` loop:

```cpp
float s = 10;
float x = 20;
float i = 40;

while(i >= 1)
{
    s += i * 2;
    x += s / i;
    i /= 2;
}

x = x / 100;

cout << "x = " << x << endl;
```

Question 3.
Describe the various parts of a function. Make sure you include descriptions about arguments and return values. Give an example showing each part of a function.

Question 4.
Compare and contrast an array and a string.