Algorithm Exercises

1. Write an algorithm that shows the steps to do google search about *Algorithm*.

   1. Open web browser
   2. Type *www.google.com* in the address bar.
   3. After page loaded, type the word Algorithm in the search text box.
   4. Press the Button labelled Google Search.
   5. Browser the results and click the link which is suitable to open the web page.

2. Write an algorithm to display sum of all even numbers between 1 to 100.
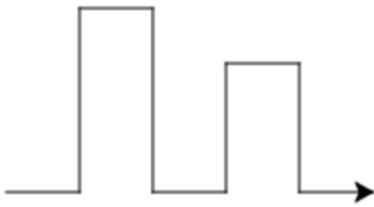
   1. Assign 0 to x
   2. Assign 0 to sum
   3. For numbers i = 50
   4.   Increase x by 2
   5.   Add x to sum [sum = sum + x]
   6. Next i
   7. Display sum

3. Identify the output of the below algorithm.

1. Move the pen forward 100 steps
2. Change the angle to the left 45 degrees
3. Move the pen forward 100 steps
4. Change the angle to the left 135 degrees
5. Move the pen forward 100 steps
6. Change the angle to the left 45 degrees
7. Move the pen forward 100 steps

4. Write an algorithm to draw the shape shown below.


```
Move pen forward 40 steps
Change the angle to the left 90 degrees
Move pen forward 100 steps
Change the angle to the right 90 degrees
Move pen forward 40 steps
Change the angle to the right 90 degrees
Move pen forward 100 steps
Change the angle to the left 90 degrees
Move pen forward 40 steps
Change the angle to the left 90 degrees
Move pen forward 70 steps
Change the angle to the right 90 degrees
Move pen forward 40 steps
Change the angle to the right 90 degrees
Move pen forward 70 steps
```

```
Change the angle to the left 90 degrees
Move pen forward 40 steps
```

5. Given an algorithm to draw a triangle, but it does not draw triangle. Identify the errors and fix it.

1. Move pen 100 steps.
2. Change the angle to the right by 90 degrees.
3. Change the angle to the left by 90 degrees.
4. Move pen 100 steps.

1. Move pen forward 100 steps.
2. Change the angle to the right by 120 degrees.
3. Move pen forward 100 steps.
4. Change the angle to the right by 120 degrees.
5. Move pen forward 100 steps.