Exercise 2

a) . Last sprint: 3 man team

- 32 story points
- 45 man days

Focus factor: 32/45 = 71%

Next sprint: 5 man team, 1 can only work 80% time

- 45 + 27 = 72 man days
- 72 man days * 71% focus factor = 51.12 story points

Estimated Velocity: 51.12 story points

b). You would estimate the focus factor by estimating the Story points and Man days within the group.
Story points: Determine the story points by sizing the project by considering

- The amount of work to do
- The complexity of the work
- Risk of the work
- Time of completion

Estimate the actual velocity (story points) then divide that by the estimated man hours of the group.

c). Firstly the team would have to establish a baseline story. From their the team would reference each potential story from the baseline and decide how many points that story is. I believe that this method of estimating story points is worse than the poker method.

e). public class BinaryTree
```
{
    private Node root;

    public BinaryTree()
    {
        root = null;
    }

    public void add(int current) {
        Node newNode = new Node(current);
        if(root == null) {
            root = newNode;
        } else {
            Node current = root;
            Node parent;
            while (true) {
                parent = current;
                if (current < current.getcurrent()) {
                    current = current.getLeft();
                    if (current == null) {
                        parent.setLeft(newNode);
                        return;
                    }
                }
                else {
                    current = current.getRight();
                    if (current == null)
                    {
                        parent.setRight(newNode);
                        return;
                    }
                }
```

```
            }
        }
    }

    public void delete(int current) {

    }

    public void print() {

    }
}


public class Node
{
    private int current;
    private Node left, right;

    public Node(int current) {
        this.current = current;
        left = null;
        right = null;
    }


}
```

g).
```
public class Node {
        private int salary, SSN;
        private String name;
        private Node next;
        Node(int s, int SS, String n){
                salary = s;
                name = n;
                SSN = SS;
                next = null;
        }
}

public class LL {
        private Node head;
}
```