

2020 Practice Exam 1 FRA

1. a public static int hailstoneLength(int n)

```
{
    int count = 0;
    while (n > 0)
    {
        if (n % 2 == 0)
            n /= 2;
        else
        {
            n = 3 * n + 1;
            count++;
        }
    }
    return count + 1;
}
```

b. public static boolean isLongSeq(int n)

```
{
    hailstone.setLength(n);
    return n < hailstone.getLength();
}
```

c. public static double propLong(int n)

```
{
    int count = 0;
    for (int i = 1; i <= n; i++)
    {
        if (isLongSeq(i))
            count++;
    }
    return count / n;
}
```

```
public static void main (String[] args)
{
    System.out.println(hailstone.getLength());
    Scanner sc = new Scanner(System.in);
    n = sc.nextInt();
}
```



```
3a. public void addReview (Product Review prodReview)
    {
        this.reviewList.add (prodReview);
        if (! productList.contains (prodReview.getName()))
            this.productList.add (prodReview.getName());
    }
}
```

```
b. public int getNumGoodReviews (String prodName)
    {
        int ngr = 0;
        for (Product Review prodReview: this.reviewList) {
```