

while and if examples

FindMax

```
import java.io.*;
import java.util.*;
public class FindMax {
    public static void main(String args[]) {
        int num;
        int count;
        int i;
        int max;
        Scanner s = new Scanner(System.in);
        System.out.print("How many integers will you enter: ");
        count = s.nextInt();
        System.out.print("Enter an integer: ");
        max = s.nextInt();
        i = 1;
        while (i < count) {
            System.out.print("Enter an integer: ");
            num = s.nextInt();
            if (num > max) {
                max = num;
            }
            i = i + 1;
        }
        System.out.printf("The maximum number entered is %d.\n", max);
    }
}
```

FindMaxA

```
import java.io.*;
import java.util.*;

public class FindMaxA {
    public static void main(String args[]) {
        int num;
        int count;
        int max;
        Scanner s = new Scanner(System.in);
        System.out.print("How many integers will you enter: ");
        count = s.nextInt();
        System.out.print("Enter an integer: ");
        max = s.nextInt();
        count = count - 1;
        while (count > 0) {
            System.out.print("Enter an integer: ");
            num = s.nextInt();
            if (num > max) {
                max = num;
            }
            count = count - 1;
        }
        System.out.printf("The maximum number entered is %d.\n", max);
    }
}
```

FindMaxB

```
import java.io.*;
import java.util.*;

public class FindMaxB {
    public static void main(String args[]) {
        int num;
        int max;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter a positive integer or 0 to quit: ");
        num = s.nextInt();
        max = 0;
        while (num != 0) {
            if (num > max) {
                max = num;
            }
            System.out.print("Enter a positive integer or 0 to quit: ");
            num = s.nextInt();
        }
        System.out.printf("The maximum number entered was %d.\n", max);
    }
}
```

FindMaxC

```
import java.io.*;
import java.util.*;

public class FindMaxC {
    public static void main(String args[]) {
        int num;
        int max;
        int maxCount;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter a positive integer or 0 to quit: ");
        num = s.nextInt();
        max = 0;
        maxCount = 1;
        while (num != 0) {
            if (num > max) {
                max = num;
                maxCount = 1;
            } else {
                if (num == max) {
                    maxCount = maxCount + 1;
                }
            }
            System.out.print("Enter a positive integer or 0 to quit: ");
            num = s.nextInt();
        }
        System.out.printf("The maximum number entered was %d.\n", max);
        System.out.printf("%d was entered %d times.\n", max, maxCount);
    }
}
```

FindMaxD

```
import java.io.*;
import java.util.*;

public class FindMaxD {
    public static void main(String args[]) {
        int num;
        int max;
        int maxCount;
        Scanner s = new Scanner(System.in);
        System.out.print("Enter a positive integer or 0 to quit: ");
        num = s.nextInt();
        max = 0;
        maxCount = 1;
        while (num != 0) {
            if (num > max) {
                max = num;
                maxCount = 1;
            } else if (num == max) {
                maxCount = maxCount + 1;
            }
            System.out.print("Enter a positive integer or 0 to quit: ");
            num = s.nextInt();
        }
        System.out.printf("The maximum number entered was %d.\n", max);
        System.out.printf("%d was entered %d times.\n", max, maxCount);
    }
}
```