

Name : \_\_\_\_\_ Date : \_\_\_\_\_

### A+ Computer Science - Sort/Search Worksheet 4

1. Complete the following method `binarySearch`. Fill in each blank below.

```
int binarySearch(int [] stuff, int val )
{
    int bot= 0, top = stuff.length-1;
    while(bot<=top)
    {
        int middle = _____

        if (stuff[middle] == val)  return middle;
        else
            if (stuff[middle] > val)

                top = _____

            else
                bot = _____
    }
    return -1;
}
```

2. Write the `binarySearch` using recursion.

```
public static int binarySearch(int[] stuff, int item, int bot, int top)
{
```