

# Introduction to markdown

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## Text

- this is a bullet point
  - this is part of second point

This is **bold**

This is *Italic*

```
1
2     # creates randomized arrays for testing
3     def create_array(size=10,max=50):
4         from random import randint
5         return [randint(0,max) for _ in range(size)]
6
7     # executes insertion sort on the input array
8     def insertion_sort(a):
9         for sort_len in range(1,len(a)):
10             cur_item=a[sort_len] # next item to insert
11             insert_idx=sort_len # current index of item
12             # iterate down until we reach appropriate insertion location
13             while insert_idx>0 and cur_item<a[insert_idx-1]:
14                 a[insert_idx]=a[insert_idx-1] # shift elements to make room
15                 insert_idx+=-1 # decrement the insertion index
16             a[insert_idx]=cur_item # insert at correct location
17         return a
18
19
20     a=create_array()
21     print a
22     a=insertion_sort(a)
23     print a
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## Code

```
value1 = input("enter a value: ")
```