Additional Sample Input for Assignment 1

```
a " Columbia " (3,-2) (-2,0) (6,2)
a "University" (1,-2)(2,-1)(6,0)
a "Phillip" (2,-2 ) ( 2 , 2 )
a "Lester" (3,-4)
a "Albert" (4,-2) (4,2)
a "Hazel" (5,-1) (5,2)
a "University" (6,-4) (8,12)
r "King"
c "King"
g // See Graph 1
```

```
V = \{
1: (-2,0)
2: (2,1)
3: (4,1.5)
4: (5,1.75)
5: (6,2)
7: (1,-2)
8: (2,-1)
9: (4,-0.5)
10: (5,-0.25)
11: (6,0)
12: (2,-2)
13: (2,2)
14: (4,-2)
15: (4,2)
16: (5,-1)
17: (5,2)
E = {
<1,2>
<2.3>.
<2,13>,
<2.8>.
<3,15>,
<3,9>
<3.4>.
<4,17>,
<4.10>.
```

```
<4,5>,
<7,8>,
<8,12>,
<8,9>,
<9,14>,
<9,10>,
<10,16>,
<10,11>
}
```

c "Hazel" (5,-1) (5 , 0) g // See Graph 2

```
V = \{
1: (-2,0)
2: (2,1)
3: (4,1.5)
4: (5,1.75)
5: (6,2)
7: (1,-2)
8: (2,-1)
9: (4,-0.5)
11: (6,0)
12: (2,-2)
13: (2,2)
14: (4,-2)
15: (4,2)
16: (5,0)
17: (5,2)
E = {
<1,2>,
<2,3>,
<2,13>,
<2,8>,
<3,15>,
<3,9>,
<3,4>,
<4,17>,
<4,16>,
<4,5>,
```

```
<7,8>,
<8,12>,
<8,9>,
<9,14>
}
```

The Standard Error Output for the above example can be as follows:

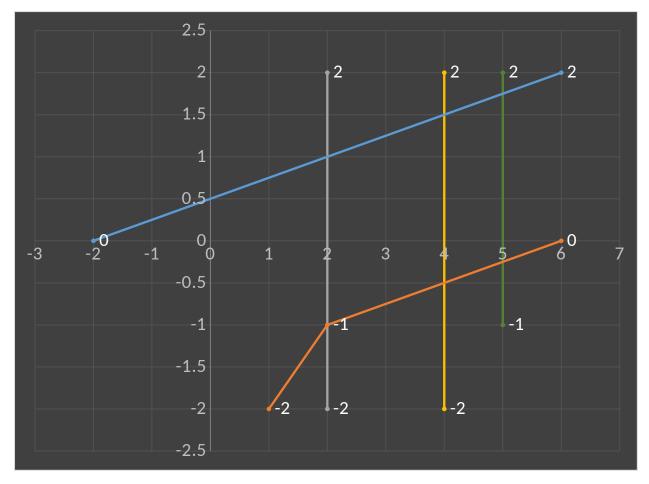
Error: Incomplete coordinates in a "Lester", no end point.

Error: 'a' specified for a street that already exists.

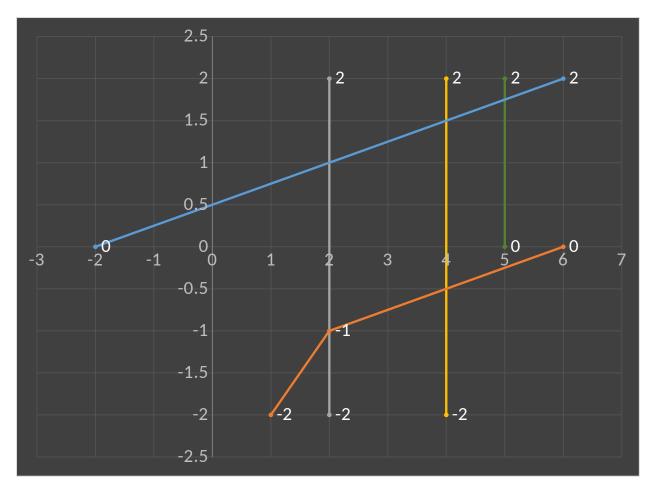
Error: 'r' specified for a street that does not exist.

Error: 'c' specified for a street that does not exist.

Additionally, the following graphs demonstrates the aforementioned sample input.



Graph 1



Graph 2