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Computational Problem Solving II

Lab 6 write up

Program not restarted so each test start at end of last

Test 1) input of line

	Input 1
operation	1
line 1	0
line 2/a	2
b	3
c	0

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
1
which line would you like to work with: [0..3]
0
please type in the value:
a = 2
b = 3
c = 0
2.00 x + 3.00 y = 0.00
Press any key to continue . . .
```

Test2) Display of line

	Input 1
operation	2
line 1	1
line 2/a	
b	
c	

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
2
which line would you like to displa: [0..3]
1
3.00 x + 2.00 y = 0.00
Press any key to continue . . .
```

Test3) Display of Multiple line

	Input 1	Input 2	Input 3	Input 4
operation	1	1	1	3
line 1	1	2	3	
line 2/a	3	3	2	
b	2	2	3	
c	0	1	1	

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
3
2.00 x + 3.00 y = 0.00
3.00 x + 2.00 y = 0.00
3.00 x + 2.00 y = 1.00
2.00 x + 3.00 y = 1.00
Press any key to continue . . .

```

Test4) Test for slope of lines

	Input 1	Input 2	Input 3	Input 4	Input 5	Input 6
operation	4	4	1	1	4	4
line 1	0	2	3	2	3	2
line 2/a			-2	0		
b			0	-3		
c			1	1		

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
4
which line would you like to work with: [0..3]
0
2.00 x + 3.00 y = 0.00
slope: -0.67
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
4
which line would you like to work with: [0..3]
2
3.00 x + 2.00 y = 1.00
slope: -1.50
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
4
which line would you like to work with: [0..3]
3
-2.00 x + 0.00 y = 1.00
slope: vertical
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
4
which line would you like to work with: [0..3]
2
0.00 x - 3.00 y = 1.00
slope: horizontal
Press any key to continue . . .

```

Test5) Test for equal lines

	Input 1	Input 2	Input 3	Input 4	Input 5	Input 6	Input 7	Input 8
operation	5	5	1	1	5	5	1	5
line 1	0	3	2	1	3	3	1	0
line 2/a	1	2	-2	4	2	1	4	1
b			0	0			6	
c			1	-2			0	

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
5
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
1
3.00 x + 2.00 y = 0.00
these two lines are NOT EQUAL
Press any key to continue . . .
```

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
5
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
0.00 x - 3.00 y = 1.00
these two lines are NOT EQUAL
Press any key to continue . . .
```

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
5
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
-2.00 x + 0.00 y = 1.00
these two lines are EQUAL
Press any key to continue . . .
```

```
Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
5
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
1
4.00 x + 0.00 y = -2.00
these two lines are EQUAL
Press any key to continue . . .
```

Test6) Test for Parallel lines

	Input 1	Input 2	Input 3	Input 4	Input 5	Input 6
operation	6	6	1	1	6	6
line 1	0	3	1	2	0	3
line 2/a	1	2	3	0	1	2
b			2	-2		
c			0	1		

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
6
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
1
4.00 x + 6.00 y = 0.00
these two lines are PARALLEL
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
6
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
-2.00 x + 0.00 y = 1.00
these two lines are PARALLEL
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
6
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
1
3.00 x + 2.00 y = 0.00
these two lines are NOT PARALLEL
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
6
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
0.00 x - 2.00 y = 1.00
these two lines are NOT PARALLEL
Press any key to continue . . .

```

Test7) Test for Perpendicular lines

	Input 1	Input 2	Input 3	Input 4
operation	7	7	7	7
line 1	0	3	0	3
line 2/a	1	2	2	1
b				
c				

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
7
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
1
3.00 x + 2.00 y = 0.00
these two lines are PERPENDICULAR
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
7
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
0.00 x - 2.00 y = 1.00
these two lines are PERPENDICULAR
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
7
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
2
0.00 x - 2.00 y = 1.00
these two lines are NOT PERPENDICULAR
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
7
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
1
3.00 x + 2.00 y = 0.00
these two lines are NOT PERPENDICULAR
Press any key to continue . . .

```

Test8) Test for intersection

	Input 1	Input 2
operation	8	8
line 1	0	3
line 2/a	1	2
b		
c		

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
8
select the first line: [0..3]
0
2.00 x + 3.00 y = 0.00
select the second line: [0..3]
1
3.00 x + 2.00 y = 0.00
Intersection: ( -0.00 , -0.00 )
Press any key to continue . . .

```

```

Select which you would like to do:
1) Set
2) Display Line
3) Display ALL Lines
4) Slope
5) Equal
6) Parallel
7) Perpendicular
8) Intersection
9) Quit
8
select the first line: [0..3]
3
-2.00 x + 0.00 y = 1.00
select the second line: [0..3]
2
0.00 x - 2.00 y = 1.00
Intersection: ( 0.50 , 0.50 )
Press any key to continue . . .

```