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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin Mobius 1 10
μ(1)      = 1      *
μ(2)      = -1     *
μ(3)      = -1     *
μ(4)      = 0      *
μ(5)      = -1     *
μ(6)      = 1      *
μ(7)      = -1     *
μ(8)      = 0      *
μ(9)      = 0      *
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin Mobius 1000 1010
μ(1000)    = 0      *
μ(1001)    = -1     *
μ(1002)    = -1     *
μ(1003)    = 1      *
μ(1004)    = 0      *
μ(1005)    = -1     *
μ(1006)    = 1      *
μ(1007)    = 1      *
μ(1008)    = 0      *
μ(1009)    = -1     *
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin Mobius -10 0
Enter 2 arguments (lower_limit[integer, >0], upper_limit[integer, >lower_limit])!
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin Mobius 10 1
Enter 2 arguments (lower_limit[integer, >0], upper_limit[integer, >lower_limit])!
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master

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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SetDemo
A [ 6] = [0, 3, 4, 6, 8, 9]
B [ 6] = [0, 1, 3, 6, 8, 9]
C [ 6] = [1, 2, 4, 5, 6, 9]

A union B [ 7] = [0, 1, 3, 4, 6, 8, 9]
B union C [ 9] = [0, 1, 2, 3, 4, 5, 6, 8, 9]
C union A [ 9] = [0, 1, 2, 3, 4, 5, 6, 8, 9]
A union B union C [ 9] = [0, 1, 2, 3, 4, 5, 6, 8, 9]

A intersection B [ 5] = [0, 3, 6, 8, 9]
B intersection C [ 3] = [1, 6, 9]
C intersection A [ 3] = [4, 6, 9]
A intersection B intersection C [ 2] = [6, 9]

A - B [ 1] = [4]
B - C [ 3] = [0, 3, 8]
C - A [ 3] = [1, 2, 5]
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SetDemo
A [ 6] = [0, 1, 3, 5, 7, 8]
B [ 7] = [0, 2, 3, 4, 5, 6, 7]
C [ 7] = [0, 1, 3, 6, 7, 8, 9]

A union B [ 9] = [0, 1, 2, 3, 4, 5, 6, 7, 8]
B union C [10] = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
C union A [ 8] = [0, 1, 3, 5, 6, 7, 8, 9]
A union B union C [10] = [0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

A intersection B [ 4] = [0, 3, 5, 7]
B intersection C [ 4] = [0, 3, 6, 7]
C intersection A [ 5] = [0, 1, 3, 7, 8]
A intersection B intersection C [ 3] = [0, 3, 7]

A - B [ 2] = [1, 8]
B - C [ 3] = [2, 4, 5]
C - A [ 2] = [6, 9]
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master
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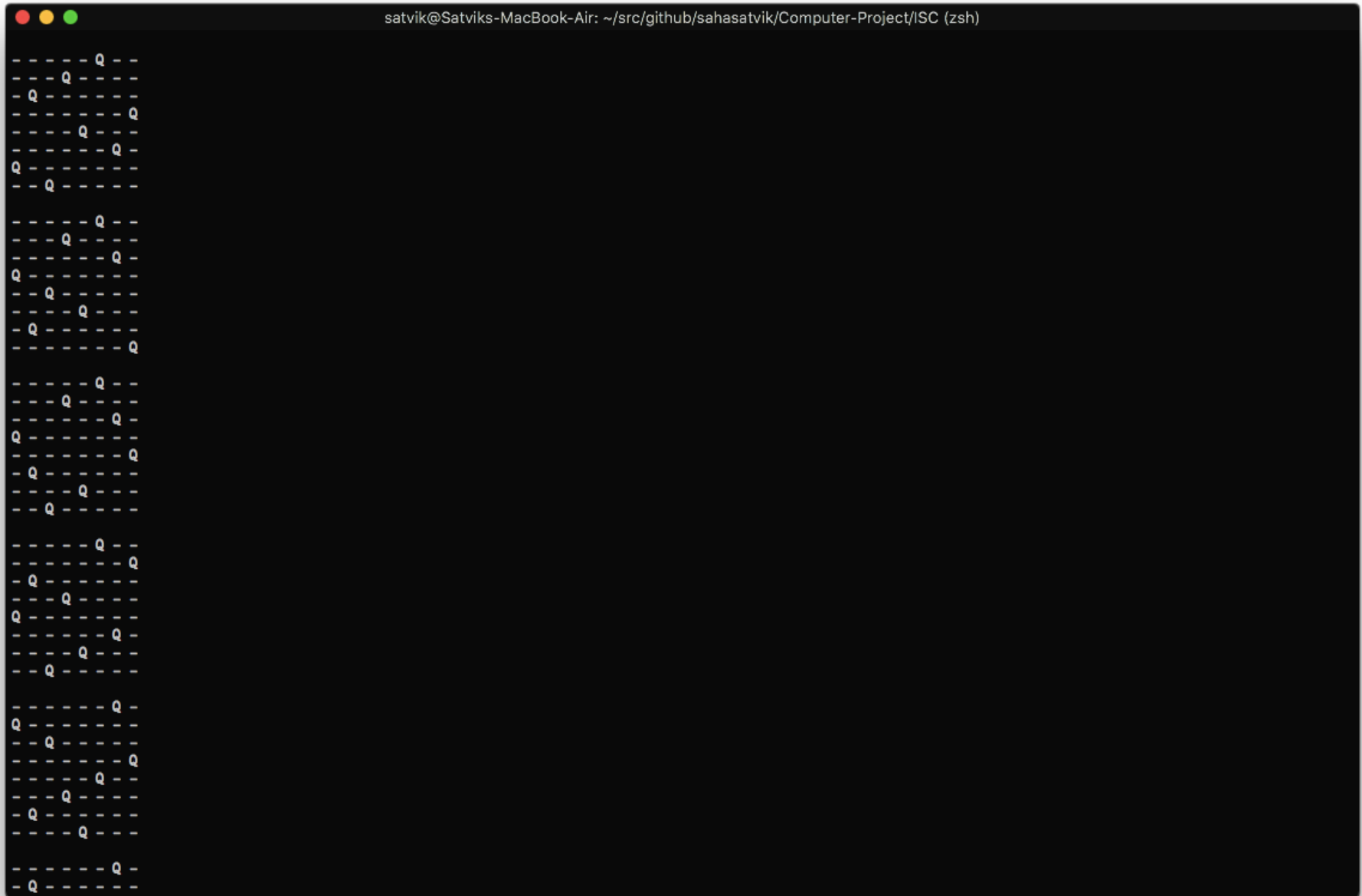
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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC ↗ master → java -cp bin VectorDemo
Magnitude of (1.0, 1.0) is 1.414214
Sum of vectors (6.0, 9.0, -1.0), (7.0, 6.0, -7.0), (-5.0, 1.0, 8.0) is (8.0, 16.0, 0.0)
Dot product of (6.0, 9.0, -1.0) and (7.0, 6.0, -7.0) is 103
The angle between (6.0, 9.0, -1.0) and (7.0, 6.0, -7.0) is 35.003899 degrees
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC ↗ master → java -cp bin VectorDemo
Magnitude of (1.0, 1.0) is 1.414214
Sum of vectors (7.0, 1.0, -9.0), (-9.0, -5.0, -8.0), (5.0, 5.0, -5.0) is (3.0, 1.0, -22.0)
Dot product of (7.0, 1.0, -9.0) and (-9.0, -5.0, -8.0) is 4
The angle between (7.0, 1.0, -9.0) and (-9.0, -5.0, -8.0) is 88.464059 degrees
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC ↗ master → java -cp bin VectorDemo
Magnitude of (1.0, 1.0) is 1.414214
Sum of vectors (3.0, -9.0, -3.0), (0.0, 6.0, 9.0), (9.0, 5.0, 1.0) is (12.0, 2.0, 7.0)
Dot product of (3.0, -9.0, -3.0) and (0.0, 6.0, 9.0) is -81
The angle between (3.0, -9.0, -3.0) and (0.0, 6.0, 9.0) is 138.817652 degrees
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC ↗ master →
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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin TowersOfHanoi 1
(1) : A -> C
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin TowersOfHanoi 2
(1) : A -> B
(2) : A -> C
(1) : B -> C
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin TowersOfHanoi 3
(1) : A -> C
(2) : A -> B
(1) : C -> B
(3) : A -> C
(1) : B -> A
(2) : B -> C
(1) : A -> C
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin TowersOfHanoi 4
(1) : A -> B
(2) : A -> C
(1) : B -> C
(3) : A -> B
(1) : C -> A
(2) : C -> B
(1) : A -> B
(4) : A -> C
(1) : B -> C
(2) : B -> A
(1) : C -> A
(3) : B -> C
(1) : A -> B
(2) : A -> C
(1) : B -> C
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin TowersOfHanoi
Enter 1 argument (number_of_disks[integer, >0])!
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master
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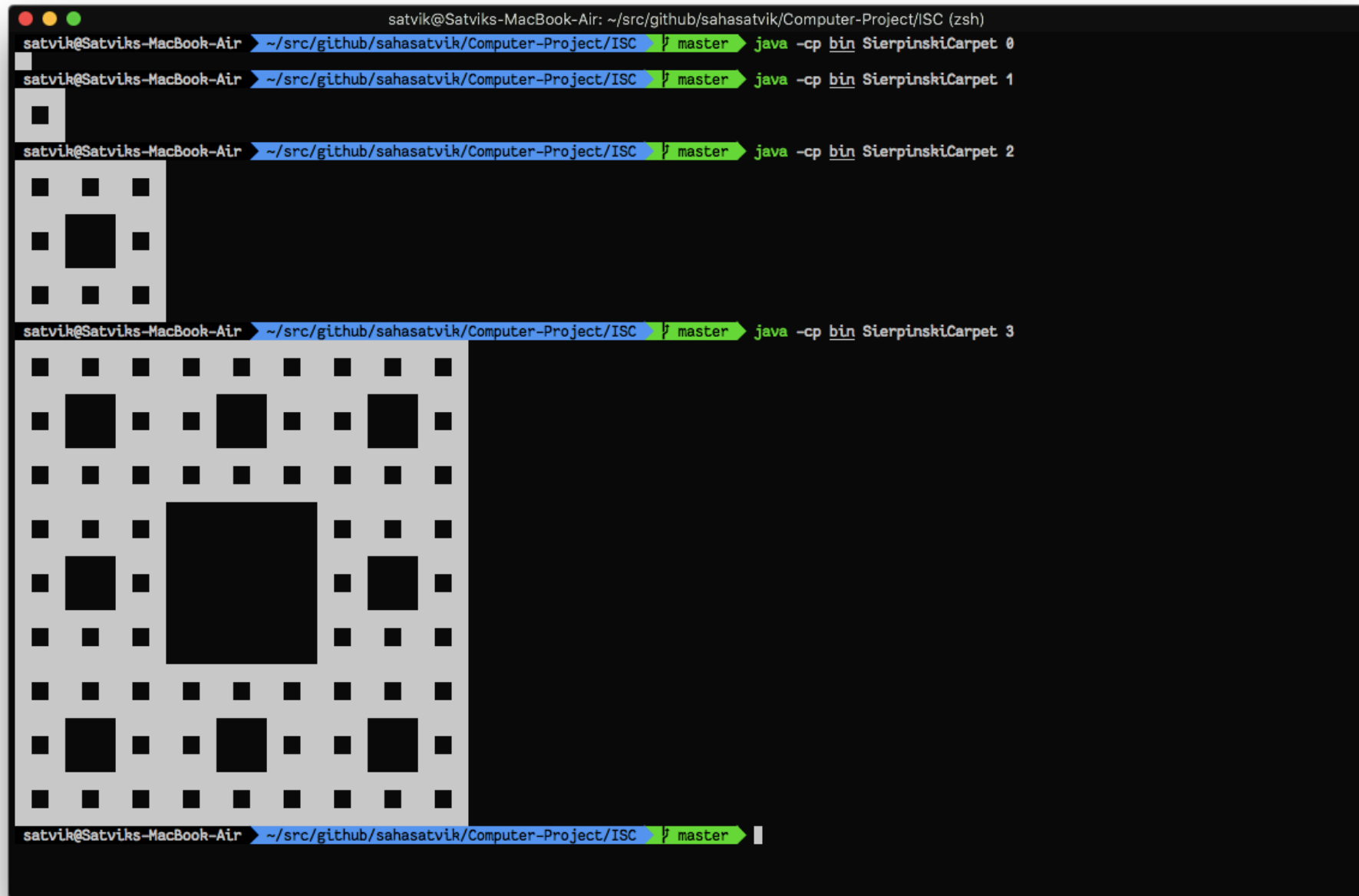
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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 8
92
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 10
724
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 12
14200
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 14
365596
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 1 true
Q
1
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens 4 true
- Q - -
- - - Q
Q - - -
- - Q -

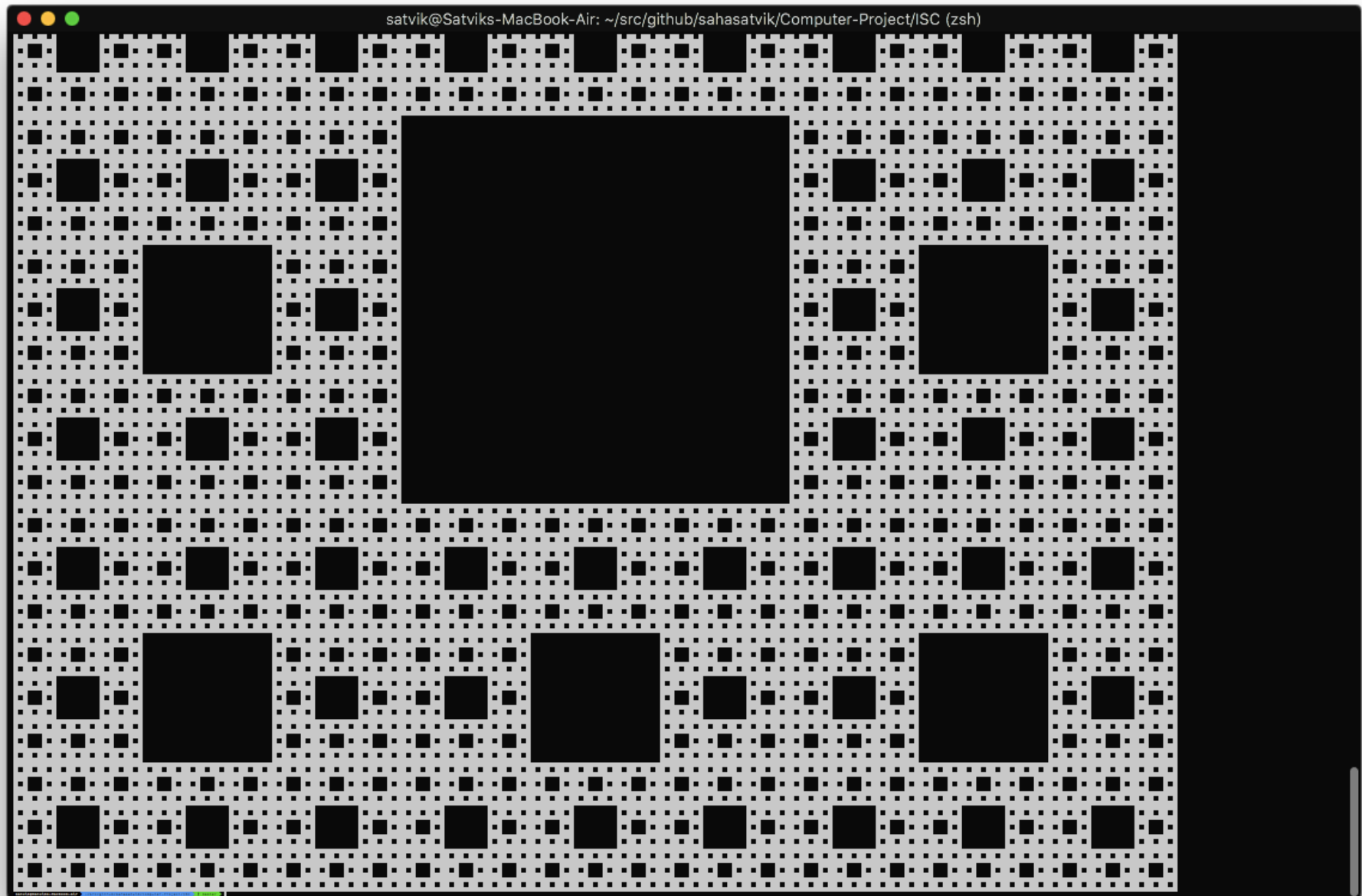
- - Q -
Q - - -
- - - Q
- Q - -

2
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  java -cp bin NQueens
Enter at least 1 argument (size_of_board[integer], <show_solutions>[true/false])!
(show_solutions defaults to false)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC  master  █
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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SierpinskiCarpet 0
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SierpinskiCarpet 1
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SierpinskiCarpet 2
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin SierpinskiCarpet 3
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master
```






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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 1 1 +
Evaluated Expression : 2.0
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 2 3 * 3 2 ^ 2 - *
Evaluated Expression : 42.0
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 1 1 + +
Insufficient operands!
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 1 0 /
Evaluated Expression : Infinity
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 0 0 /
Evaluated Expression : NaN
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master] java -cp bin RPNCalculator
Reverse Polish Expression : 1 2 3 4 5 6 7 * * * * *
Evaluated Expression : 5040.0
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC [master]
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satvik@Satviks-MacBook-Air: ~/src/github/sahasatvik/Computer-Project/ISC (zsh)
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master java -cp bin QueueDemo
Enqueuing : 68
Enqueuing : 0
Enqueuing : 91
Enqueuing : 49
Enqueuing : 86
Enqueuing : 18
Enqueuing : 36
Enqueuing : 24
Enqueuing : 3
Enqueuing : 36
Enqueuing : 16
Enqueuing : 29
Enqueuing : 68
Enqueuing : 93
Queue[14] : [68, 0, 91, 49, 86, 18, 36, 24, 3, 36, 16, 29, 68, 93]
Number about to be dequeued : 68
(Dequeuing 10 numbers)
Dequeuing : 68
Dequeuing : 0
Dequeuing : 91
Dequeuing : 49
Dequeuing : 86
Dequeuing : 18
Dequeuing : 36
Dequeuing : 24
Dequeuing : 3
Dequeuing : 36
Queue[ 4] : [16, 29, 68, 93]
(Dequeuing until empty)
Dequeuing : 16
Dequeuing : 29
Dequeuing : 68
Dequeuing : 93
Queue[ 0] : []
satvik@Satviks-MacBook-Air > ~/src/github/sahasatvik/Computer-Project/ISC master
```