

AssignmentB QuokkaSelfieQuest

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Test Cases

Here are the test cases for the QuokkaSelfieQuest simulation game:

Test Number	Reason for Test	Input	Expected Output
1	Check if the simulation runs without errors	QuokkaSelfieQuest.java ran without errors	Welcome to Quokka Selfie Quest Simulation Game
2	Test if game starts correctly	Enter the simulation: 1	Setting up the quokka population
3	Test the initialization of quokka population	How many Quokkas: 20	New babies: 8
4	Check daily progress	Press enter to continue to the next day	**** Day 1 ****
5	Check if quokka population is growing	New baby today: 6	Current alive quokkas (incl babies): 34
...
n	Test the final simulation summary	Writing summary to populationFinal.txt	QSQSF: -505.0 QPSF: 8.35 Day count for dead quokkas: 5.991735537190083

Simulation Execution

To execute the simulation, follow these steps:

Compile the QuokkaSelfieQuest.java file:

Copy code: `javac QuokkaSelfieQuest.java`

Run the simulation:

Copy code: `java QuokkaSelfieQuest.java`

Simulation Output

The following is the output of the simulation:

```
[user@sahara ~]$ javac QuokkaSelfieQuest.java
```

```
[user@sahara ~]$ java QuokkaSelfieQuest.java
```

Welcome to Quokka Selfie Quest Simulation Game

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1. Start simulation.

0. Exit simulation.

Please enter the simulation: 1

How many Quokkas: 20

Setting up the quokka population

New babies: 8

Simulation started:

Press enter to continue to the next day:

20

Enter key was pressed.

**** Day 1 ****

Current alive quokkas (incl babies): 28

Current total food bags: 48

Sorting the quokkas based on their level of food supply

Number of tourist groups: 30

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 3

Group Photo: 3

Individual Video: 3

Individual Photo: 3

Individual Sketch: 3

(Total selfies: 15)

Earned food bags:136

Daily Summary

=====

Selfie Stats

Live quokkas: 28

Quokkas died today: 0

New baby today: 6

Consumed food bags: 48

Current food bags: 136

Press enter to continue to the next day:

Enter key was pressed.

**** Day 2 ****

Current alive quokkas (incl babies): 34

Current total food bags: 54

Sorting the quokkas based on their level of food supply

Number of tourist groups: 35

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 4

Group Photo: 4

Individual Video: 4

Individual Photo: 4

Individual Sketch: 4

(Total selfies: 20)

Earned food bags:185

Daily Summary

=====

Selfie Stats

Live quokkas: 34

Quokkas died today: 0

New baby today: 2

Consumed food bags: 54

Current food bags: 267

Press enter to continue to the next day:

Enter key was pressed.

**** Day 3 ****

Current alive quokkas (incl babies): 36

Current total food bags: 56

Sorting the quokkas based on their level of food supply

Number of tourist groups: 10

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1

Group Photo: 1

Individual Video: 1

Individual Photo: 1

Individual Sketch: 1

(Total selfies: 5)

Earned food bags:13

Daily Summary

=====

Selfie Stats

Live quokkas: 36

Quokkas died today: 0

New baby today: 8

Consumed food bags: 56

Current food bags: 224

Press enter to continue to the next day:

Enter key was pressed.

**** Day 4 ****

Current alive quokkas (incl babies): 44

Current total food bags: 64

Sorting the quokkas based on their level of food supply

Number of tourist groups: 10

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 44

Quokkas died today: 0

New baby today: 7

Consumed food bags: 64

Current food bags: 160

Press enter to continue to the next day:

Enter key was pressed.

**** Day 5 ****

Current alive quokkas (incl babies): 51

Current total food bags: 71

Sorting the quokkas based on their level of food supply

Number of tourist groups: 15

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1

Group Photo: 1

Individual Video: 1

Individual Photo: 1

Individual Sketch: 1

(Total selfies: 5)

Earned food bags:49

Daily Summary

=====

Selfie Stats

Live quokkas: 51

Quokkas died today: 0

New baby today: 7

Consumed food bags: 71

Current food bags: 138

Press enter to continue to the next day:

Enter key was pressed.

**** Day 6 ****

Current alive quokkas (incl babies): 58

Current total food bags: 78

Sorting the quokkas based on their level of food supply

Number of tourist groups: 12

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1

Group Photo: 1

Individual Video: 1

Individual Photo: 1

Individual Sketch: 1

(Total selfies: 5)

Earned food bags:36

Daily Summary

=====

Selfie Stats

Live quokkas: 58

Quokkas died today: 0

New baby today: 6

Consumed food bags: 78

Current food bags: 96

Press enter to continue to the next day:

Enter key was pressed.

**** Day 7 ****

Current alive quokkas (incl babies): 64

Current total food bags: 84

Sorting the quokkas based on their level of food supply

Number of tourist groups: 16

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:29

Daily Summary

=====

Selfie Stats

Live quokkas: 64

Quokkas died today: 0

New baby today: 3

Consumed food bags: 84

Current food bags: 41

Press enter to continue to the next day:

Enter key was pressed.

**** Day 8 ****

Current alive quokkas (incl babies): 67

Current total food bags: 41

Sorting the quokkas based on their level of food supply

Number of tourist groups: 25

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 67

Quokkas died today: 0

New baby today: 8

Consumed food bags: 41

Current food bags: 0

Press enter to continue to the next day:

Enter key was pressed.

**** Day 9 ****

Current alive quokkas (incl babies): 75

Current total food bags: 0

Sorting the quokkas based on their level of food supply
Number of tourist groups: 35

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 3

Group Photo: 3

Individual Video: 3

Individual Photo: 3

Individual Sketch: 3

(Total selfies: 15)

Earned food bags:94

Daily Summary

=====

Selfie Stats

Live quokkas: 75

Quokkas died today: 0

New baby today: 3

Consumed food bags: 0

Current food bags: 94

Press enter to continue to the next day:

Enter key was pressed.

**** Day 10 ****

Current alive quokkas (incl babies): 78

Current total food bags: 94

Sorting the quokkas based on their level of food supply

Number of tourist groups: 13

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 78

Quokkas died today: 0

New baby today: 6

Consumed food bags: 94

Current food bags: 0

Press enter to continue to the next day:

Enter key was pressed.

**** Day 11 ****

Current alive quokkas (incl babies): 84

Current total food bags: 0

Sorting the quokkas based on their level of food supply

Number of tourist groups: 10

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 84

Quokkas died today: 0

New baby today: 4

Consumed food bags: 0

Current food bags: 0

Press enter to continue to the next day:

Enter key was pressed.

**** Day 12 ****

Current alive quokkas (incl babies): 88

Current total food bags: 0

Sorting the quokkas based on their level of food supply

Number of tourist groups: 15

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:114

Daily Summary

=====

Selfie Stats

Live quokkas: 88

Quokkas died today: 0

New baby today: 6

Consumed food bags: 0

Current food bags: 114

Press enter to continue to the next day:

Enter key was pressed.

**** Day 13 ****

Current alive quokkas (incl babies): 94

Current total food bags: 114

Sorting the quokkas based on their level of food supply

Number of tourist groups: 16

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:114

Daily Summary

=====

Selfie Stats

Live quokkas: 94

Quokkas died today: 0

New baby today: 6

Consumed food bags: 114

Current food bags: 114

Press enter to continue to the next day:

Enter key was pressed.

**** Day 14 ****

Current alive quokkas (incl babies): 100

Current total food bags: 114

Sorting the quokkas based on their level of food supply

Number of tourist groups: 17

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags: 91

Daily Summary

=====

Selfie Stats

Live quokkas: 100

Quokkas died today: 0

New baby today: 4

Consumed food bags: 114

Current food bags: 91

Press enter to continue to the next day:

Enter key was pressed.

**** Day 15 ****

Current alive quokkas (incl babies): 104

Current total food bags: 91

Sorting the quokkas based on their level of food supply

Number of tourist groups: 40

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 4

Group Photo: 4

Individual Video: 4

Individual Photo: 4

Individual Sketch: 4

(Total selfies: 20)

Earned food bags:120

Daily Summary

=====

Selfie Stats

Live quokkas: 104

Quokkas died today: 0

New baby today: 9

Consumed food bags: 91

Current food bags: 120

Press enter to continue to the next day:

Enter key was pressed.

**** Day 16 ****

Current alive quokkas (incl babies): 112

Current total food bags: 120

Sorting the quokkas based on their level of food supply

Number of tourist groups: 30

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:91

Daily Summary

=====

Selfie Stats

Live quokkas: 112

Quokkas died today: 1

New baby today: 8

Consumed food bags: 120

Current food bags: 91

Press enter to continue to the next day:

Enter key was pressed.

**** Day 17 ****

Current alive quokkas (incl babies): 120

Current total food bags: 91

Sorting the quokkas based on their level of food supply

Number of tourist groups: 10

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1

Group Photo: 1

Individual Video: 1

Individual Photo: 1

Individual Sketch: 1

(Total selfies: 5)

Earned food bags:65

Daily Summary

=====

Selfie Stats

Live quokkas: 120
Quokkas died today: 0
New baby today: 8
Consumed food bags: 91
Current food bags: 65
Press enter to continue to the next day:

Enter key was pressed.

**** Day 18 ****

Current alive quokkas (incl babies): 122
Current total food bags: 65
Sorting the quokkas based on their level of food supply
Number of tourist groups: 10

Initialising the tourist groups
Quokkas are now offering selfies to the tourist groups
Selfie Stats
=====

(Total selfies: 0)
Earned food bags:0

Daily Summary

=====

Selfie Stats
Live quokkas: 122
Quokkas died today: 6
New baby today: 8
Consumed food bags: 65
Current food bags: 0
Press enter to continue to the next day:

Enter key was pressed.

**** Day 19 ****

Current alive quokkas (incl babies): 102
Current total food bags: 0
Sorting the quokkas based on their level of food supply
Number of tourist groups: 5

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 102

Quokkas died today: 28

New baby today: 5

Consumed food bags: 0

Current food bags: 0

Press enter to continue to the next day:

Enter key was pressed.

**** Day 20 ****

Current alive quokkas (incl babies): 69

Current total food bags: 0

Sorting the quokkas based on their level of food supply

Number of tourist groups: 12

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 69

Quokkas died today: 38

New baby today: 4

Consumed food bags: 0

Current food bags: 0

Press enter to continue to the next day:

Enter key was pressed.

**** Day 21 ****

Current alive quokkas (incl babies): 33

Current total food bags: 0

Sorting the quokkas based on their level of food supply

Number of tourist groups: 19

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:68

Daily Summary

=====

Selfie Stats

Live quokkas: 33

Quokkas died today: 40

New baby today: 6

Consumed food bags: 0

Current food bags: 68

Press enter to continue to the next day:

Enter key was pressed.

**** Day 22 ****

Current alive quokkas (incl babies): 31

Current total food bags: 31

Sorting the quokkas based on their level of food supply

Number of tourist groups: 20

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:81

Daily Summary

=====

Selfie Stats

Live quokkas: 31

Quokkas died today: 8

New baby today: 8

Consumed food bags: 31

Current food bags: 118

Press enter to continue to the next day:

Enter key was pressed.

**** Day 23 ****

Current alive quokkas (incl babies): 39

Current total food bags: 39

Sorting the quokkas based on their level of food supply

Number of tourist groups: 35

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 39

Quokkas died today: 0

New baby today: 2

Consumed food bags: 39

Current food bags: 79

Press enter to continue to the next day:

Enter key was pressed.

**** Day 24 ****

Current alive quokkas (incl babies): 41

Current total food bags: 41

Sorting the quokkas based on their level of food supply

Number of tourist groups: 10

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)

Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 41

Quokkas died today: 0

New baby today: 4

Consumed food bags: 41

Current food bags: 38

Press enter to continue to the next day:

Enter key was pressed.

**** Day 25 ****

Current alive quokkas (incl babies): 45

Current total food bags: 38

Sorting the quokkas based on their level of food supply

Number of tourist groups: 8

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1
Group Photo: 1
Individual Video: 1
Individual Photo: 1
Individual Sketch: 1
(Total selfies: 5)
Earned food bags:65

Daily Summary

=====

Selfie Stats

Live quokkas: 45
Quokkas died today: 0
New baby today: 2
Consumed food bags: 38
Current food bags: 65
Press enter to continue to the next day:

Enter key was pressed.

**** Day 26 ****

Current alive quokkas (incl babies): 47
Current total food bags: 47
Sorting the quokkas based on their level of food supply
Number of tourist groups: 15

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

(Total selfies: 0)
Earned food bags:0

Daily Summary

=====

Selfie Stats

Live quokkas: 47
Quokkas died today: 0
New baby today: 2
Consumed food bags: 47
Current food bags: 18
Press enter to continue to the next day:

Enter key was pressed.

**** Day 27 ****

Current alive quokkas (incl babies): 49

Current total food bags: 18

Sorting the quokkas based on their level of food supply

Number of tourist groups: 18

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags: 52

Daily Summary

=====

Selfie Stats

Live quokkas: 49

Quokkas died today: 0

New baby today: 4

Consumed food bags: 18

Current food bags: 52

Press enter to continue to the next day:

Enter key was pressed.

**** Day 28 ****

Current alive quokkas (incl babies): 53

Current total food bags: 52

Sorting the quokkas based on their level of food supply

Number of tourist groups: 17

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 1

Group Photo: 1

Individual Video: 1

Individual Photo: 1

Individual Sketch: 1

(Total selfies: 5)

Earned food bags:49

Daily Summary

=====

Selfie Stats

Live quokkas: 53

Quokkas died today: 0

New baby today: 7

Consumed food bags: 52

Current food bags: 49

Press enter to continue to the next day:

Enter key was pressed.

**** Day 29 ****

Current alive quokkas (incl babies): 60

Current total food bags: 49

Sorting the quokkas based on their level of food supply

Number of tourist groups: 20

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags:81

Daily Summary

=====

Selfie Stats

Live quokkas: 60

Quokkas died today: 0

New baby today: 2

Consumed food bags: 49

Current food bags: 81

Press enter to continue to the next day:

Enter key was pressed.

**** Day 30 ****

Current alive quokkas (incl babies): 62

Current total food bags: 62

Sorting the quokkas based on their level of food supply

Number of tourist groups: 35

Initialising the tourist groups

Quokkas are now offering selfies to the tourist groups

Selfie Stats

=====

Group Video: 2

Group Photo: 2

Individual Video: 2

Individual Photo: 2

Individual Sketch: 2

(Total selfies: 10)

Earned food bags: 29

Daily Summary

=====

Selfie Stats

Live quokkas: 62

Quokkas died today: 0

New baby today: 4

Consumed food bags: 62

Current food bags: 48

Final Simulation Summary

=====

QSQSF: -505.0

QPSF: 8.35

Day count for dead quokkas: 5.991735537190083

Writing summary to populationFinal.txt

Total alive quokkas incl. babies: 66

Total new born babies: 66

Total dead quokkas: 121

Total food bags: 1562