Work on project. Stage 5/6: On a coffee loop

3726 users solved this problem. Latest completion was **25 minutes ago**.

Project: <u>Coffee Machine</u>

••• Hard ② <u>()</u> 31 minutes

Description

But just one action isn't interesting. Let's improve the program so it can do multiple actions, one after another. The program should repeatedly ask what the user wants to do. If the user types "buy", "fill" or "take", then just do what the program did in the previous step. However, if the user wants to switch off the coffee machine, he should type "exit". Then the program should terminate. Also, when the user types "remaining", the program should output all the resources that the coffee machine has.

Also, do not forget that you can be out of resources for making coffee. If the coffee machine doesn't have enough resources to make coffee, the program should output a message that says it can't make a cup of coffee.

And the last improvement to the program at this step—if the user types "buy" to buy a cup of coffee and then changes his mind, he should be able to type "back" to return into the main cycle.

Remember, that:

- For the espresso, the coffee machine needs 250 ml of water and 16 g of coffee beans. It costs \$4.
- For the latte, the coffee machine needs 350 ml of water, 75 ml of milk, and 20 g of coffee beans. It costs \$7.
- And for the cappuccino, the coffee machine needs 200 ml of water, 100 ml of milk, and 12 g of coffee. It costs \$6.

Instruction

Write a program that will work endlessly to make coffee for all interested persons until the shutdown signal is given.

Example

Your coffee machine should have the same initial resources as in the example (400 ml of water, 540 ml of milk, 120 g of coffee beans, 9 disposable cups, \$550 in cash).

The symbol > represents the user input. Notice that it's not the part of the input.

i New UI version is available

```
Write action (buy, fill, take, remaining, exit):
1
2
     > remaining
3
4
     The coffee machine has:
     400 of water
5
     540 of milk
6
7
     120 of coffee beans
8
     9 of disposable cups
9
     $550 of money
1
0
1
1
     Write action (buy, fill, take, remaining, exit):
1
2
     > buy
1
3
1
4
     What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, back - to main menu:
1
5
     > 2
1
     I have enough resources, making you a coffee!
6
1
7
1
     Write action (buy, fill, take, remaining, exit):
8
1
9
     > remaining
2
0
2
1
     The coffee machine has:
2
2
     50 of water
2
3
     465 of milk
2
4
     100 of coffee beans
2
5
     8 of disposable cups
2
6
     $557 of money
2
7
2
8
     Write action (buy, fill, take, remaining, exit):
2
9
     > buy
3
0
3
1
     What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, back - to main menu:
3
2
     > 2
3
3
     Sorry, not enough water!
3
4
3
5
     Write action (buy, fill, take, remaining, exit):
3
     > fill
6
3
7
3
8
     Write how many ml of water do you want to add:
3
9
     > 1000
4
0
     Write how many ml of milk do you want to add:
4
     > 0
1
4
                                                                                     i New UI version is available
2
     Write how many grams of coffee beans do you want to add:
4
                                                                                                    Refresh page
```

> 0

```
4
     Write how many disposable cups of coffee do you want to add:
4
5
     > 0
4
6
4
7
     Write action (buy, fill, take, remaining, exit):
4
8
     > remaining
4
9
5
     The coffee machine has:
0
5
1
     1050 of water
5
2
     465 of milk
5
3
     100 of coffee beans
5
4
     8 of disposable cups
5
5
     $557 of money
5
6
5
7
     Write action (buy, fill, take, remaining, exit):
5
8
     > buy
5
9
6
     What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, back - to main menu:
0
6
     > 2
1
6
2
     I have enough resources, making you a coffee!
6
3
6
4
     Write action (buy, fill, take, remaining, exit):
6
5
     > remaining
6
6
6
7
     The coffee machine has:
6
8
     700 of water
6
9
     390 of milk
7
     80 of coffee beans
0
7
1
     7 of disposable cups
7
2
     $564 of money
7
7
     Write action (buy, fill, take, remaining, exit):
4
7
5
     > take
7
6
7
7
     I gave you $564
7
8
7
9
     Write action (buy, fill, take, remaining, exit):
8
0
     > remaining
                                                                                     (i) New UI version is available
8
1
                                                                                                    Refresh page
```

https://hyperskill.org/projects/33/stages/179/implement#solutions

```
8
2
     The coffee machine has:
8
3
     700 of water
8
4
     390 of milk
8
5
     80 of coffee beans
8
6
     7 of disposable cups
8
7
     0 of money
8
8
8
9
     Write action (buy, fill, take, remaining, exit):
9
0
     > exit
```

Code Editor IDE

```
Java
    package machine;
    import java.util.Scanner;
   public class CoffeeMachine {
5
        public static int water = 400;
 6
        public static int milk = 540;
        public static int coffeBeans = 120;
 8
        public static int disposableCups = 9;
 9
        public static int money = 550;
        public static String action = "";
10
11
        public static int coffeChoise = 0;
12
        public static int exit = 1;
13
14
        public static void supplyUpdate() {
15
            System.out.println("The coffee machine has:\n" +
                    water + " of water\n" +
16
                    milk + " of milk \n" +
17
                    coffeBeans + " of coffe beans\n" +
18
19
                     disposableCups + " of disposable cups\n" +
20
                    money + " of money");
21
        }
22
23
        public static void isAvaible() {
24
25
            if (coffeChoise == 1) {
26
                if (water >= 250 && coffeBeans >= 16 && disposableCups >= 1) {
27
                     System.out.println("I have enough resources, making you a coffee!");
28
                } else if (water < 250 && coffeBeans >= 16 && disposableCups >= 1) {
29
                    System.out.println("Sorry, not enough water!");
30
                } else if (water >= 250 && coffeBeans < 16 && disposableCups >= 1) {
                     System.out.println("Sorry, not enough coffe beans!");
31
32
                } else if (water >= 250 && coffeBeans >= 16 && disposableCups < 1) {
33
                    System.out.println("Sorry, not enough disposable cups!");
34
                } else if (water < 250 && coffeBeans < 16 && disposableCups >= 1) {
35
                     System.out.println("Sorry, not enough water and coffe beans!");
                } else if (water < 250 && coffeBeans >= 16 && disposableCups < 1) {
36
37
                     System.out.println("Sorry, not enough water and disposable cups!");
38
                } else if (water >= 250 && coffeBeans < 16 && disposableCups < 1) {
39
                    System.out.println("Sorry, not enough coffe beans and disposable cups!");
40
                } else if (water < 250 && coffeBeans < 16 && disposableCups < 1) {
                     System.out.println("Sorry, not enough resources!");
41
42
                }
43
            } else if (coffeChoise == 2) {
44
                if (water >= 350 && milk >= 75 && coffeBeans >= 20 && disposableCups >= 1) {
45
                     System.out.println("I have enough resources, making you a coffee!");
46
                } else if (water < 350 && milk >= 75 && coffeBeans >= 20 && disposableCups >= 1) {
47
                    System.out.println("Sorry, not enough water!");
48
49
                } else if (water >= 350 \&\& milk < 75 \&\& coffeBeans <math>>= 20 \&\& disposableCups >= 1)  {
50
                    System.out.println("Sorry, not enough milk!");
                } else if (water >= 350 \&\& milk >= 75 \&\& coffeBeans < 20 \&\& disposableCups <math>>= 1) {
51
                     System.out.println("Sorry, not enough coffe beans!");
52
                } else if (water >= 350 && milk >= 75 && coffeBeans >= 20 && dispo
53
                                                                                      (i) New UI version is available
54
                     System.out.println("Sorry, not enough disposable cups!");
                } else if (water < 350 && milk < 75 && coffeBeans >= 20 && disposa
55
                                                                                                      Refresh page
                     System.out.println("Sorry, not enough water and milk!");
56
57
                } else if (water < 350 && milk >= 75 && coffeBeans < 20 && disposab<del>iecups >= i) τ</del>
```

```
58
                     System.out.println("Sorry, not enough water and coffe beans!");
 59
                 } else if (water < 350 && milk >= 75 && coffeBeans >= 20 && disposableCups < 1) {
 60
                     System.out.println("Sorry, not enough water and disposable cups!");
                 } else if (water \geq 350 && milk < 75 && coffeBeans < 20 && disposableCups \geq 1) {
 61
 62
                     System.out.println("Sorry, not enough milk and coffe beans!");
                 } else if (water >= 350 && milk < 75 && coffeBeans >= 20 && disposableCups < 1) {
 63
                     System.out.println("Sorry, not enough milk and disposable cups!");
 64
                 } else if (water >= 350 && milk >= 75 && coffeBeans < 20 && disposableCups < 1) {
 65
                     System.out.println("Sorry, not enough coffe beans and disposable cups!");
 66
                 } else if (water < 350 && milk < 75 && coffeBeans < 20 && disposableCups >= 1) {
 67
                     System.out.println("Sorry, not enough water, milk and coffe beans!");
 68
 69
                 } else if (water < 350 && milk >= 75 && coffeBeans < 20 && disposableCups < 1) {
 70
                     System.out.println("Sorry, not enough water, coffe beans and disposable cups!");
 71
                 } else if (water < 350 && milk < 75 && coffeBeans >= 20 && disposableCups < 1) {
 72
                     System.out.println("Sorry, not enough water, milk and disposable cups!");
 73
                 } else if (water < 350 && milk < 75 && coffeBeans < 20 && disposableCups < 1) {
 74
                     System.out.println("Sorry, not enough resources!");
 75
             } else if (coffeChoise == 3) {
 76
 77
                 if (water >= 200 && milk >= 100 && coffeBeans >= 12 && disposableCups >= 1) {
 78
                     System.out.println("I have enough resources, making you a coffee!");
 79
                 } else if (water < 200 && milk >= 100 && coffeBeans >= 12 && disposableCups >= 1) {
 80
                     System.out.println("Sorry, not enough water!");
                 } else if (water >= 200 && milk < 100 && coffeBeans >= 12 && disposableCups >= 1) {
 81
                     System.out.println("Sorry, not enough milk!");
 82
 83
                 } else if (water \geq 200 && milk \geq 100 && coffeBeans < 12 && disposableCups \geq 1) {
 84
                     System.out.println("Sorry, not enough coffe beans!");
 85
                 } else if (water >= 200 && milk >= 100 && coffeBeans >= 12 && disposableCups < 1) {
                     System.out.println("Sorry, not enough disposable cups!");
 86
                 } else if (water < 200 && milk < 100 && coffeBeans >= 12 && disposableCups >= 1) {
 87
                     System.out.println("Sorry, not enough water and milk!");
 88
 89
                 \} else if (water < 200 && milk >= 100 && coffeBeans < 12 && disposableCups >= 1) {
 90
                     System.out.println("Sorry, not enough water and coffe beans!");
                 } else if (water < 200 && milk >= 100 && coffeBeans >= 12 && disposableCups < 1) {
 91
 92
                     System.out.println("Sorry, not enough water and disposable cups!");
 93
                 } else if (water \geq 200 && milk < 100 && coffeBeans < 12 && disposableCups \geq 1) {
                     System.out.println("Sorry, not enough milk and coffe beans!");
 94
 95
                 } else if (water >= 200 && milk < 100 && coffeBeans >= 12 && disposableCups < 1) {
                     System.out.println("Sorry, not enough milk and disposable cups!");
 96
 97
                 } else if (water >= 200 && milk >= 100 && coffeBeans < 12 && disposableCups < 1) {
98
                     System.out.println("Sorry, not enough coffe beans and disposable cups!");
 99
                 } else if (water < 200 && milk < 100 && coffeBeans < 12 && disposableCups >= 1) {
100
                     System.out.println("Sorry, not enough water, milk and coffe beans!");
101
                 } else if (water < 200 && milk >= 100 && coffeBeans < 12 && disposableCups < 1) {
102
                     System.out.println("Sorry, not enough water, coffe beans and disposable cups!");
                 } else if (water < 200 && milk < 100 && coffeBeans >= 12 && disposableCups < 1) {
103
104
                     System.out.println("Sorry, not enough water, milk and disposable cups!");
                 } else if (water < 200 && milk < 100 && coffeBeans < 12 && disposableCups < 1) {
105
106
                     System.out.println("Sorry, not enough resources!");
107
                 }
108
             }
109
110
         }
111
112
         public static void main(String[] args) {
113
              do {
114
115
                 Scanner scanner = new Scanner(System.in);
                 System.out.println("Write action (buy, fill, take, remaining, exit):");
116
117
                 String action = scanner.nextLine();
118
                  System.out.println("");
119
120
                 switch (action) {
121
122
                     case "remaining":
                         supplyUpdate();
123
                         System.out.println("");
124
125
                         break;
126
                     case "buy":
127
                         System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, back - to main menu
128
129
                         String choise = scanner.nextLine();
130
                         if (choise.length() == 1) {
131
132
                             coffeChoise = Integer.parseInt(choise);
133
                         } else {
                             System.out.println("");
134
135
                             break;
136
                         }
137
                         switch (coffeChoise) {
138
                             case 1:
139
                                                                                      i New UI version is available
                                 isAvaible();
140
141
                                 if (water >= 250 && coffeBeans >= 16 && disposable
                                                                                                      Refresh page
142
                                      water -= 250;
143
                                      coffeBeans -= 16;
```

```
144
                                      money += 4;
145
                                      disposableCups -= 1;
146
                                      System.out.println("");
147
                                  }
148
                                  break;
149
                              case 2:
150
                                  isAvaible();
                                  if (water \geq 350 && milk \geq 75 && coffeBeans \geq 20 && disposableCups \geq 1) {
151
                                      water -= 350;
152
                                      milk -= 75;
153
                                      coffeBeans -= 20;
154
155
                                      money += 7;
                                      disposableCups -= 1;
156
                                      System.out.println("");
157
                                  }
158
159
                                  break;
                              case 3:
160
161
                                  isAvaible();
                                  if (water >= 200 && milk >= 100 && coffeBeans >= 12 && disposableCups >= 1) {
162
163
                                      water -= 200;
                                      milk -= 100;
164
165
                                      coffeBeans -= 12;
166
                                      money += 6;
                                      disposableCups -= 1;
167
                                      System.out.println("");
168
169
                                  }
170
                                  break;
171
                              case 4:
172
173
                                  System.out.println("");
                                  break;
174
175
176
                              default:
                                  break;
177
178
                      break;
179
180
181
                      case "fill":
182
183
                          System.out.println("Write how many ml of water do you want to add:");
                          int waterSupply = scanner.nextInt();
184
185
                          water += waterSupply;
186
                          System.out.println("Write how many ml of milk do you want to add: ");
                          int milkSupply = scanner.nextInt();
187
                          milk += milkSupply;
188
                          System.out.println("Write how many grams of coffee beans do you want to add: ");
189
190
                          int coffeBeansSupply = scanner.nextInt();
191
                          coffeBeans += coffeBeansSupply;
                          System.out.println("Write how many disposable cups of coffee do you want to add: ");
192
193
                          int disposableCupsSupply = scanner.nextInt();
194
                          disposableCups += disposableCupsSupply;
195
                          System.out.println("");
196
                          break;
197
198
                      case "take":
                          System.out.println("");
199
200
                          System.out.println("I gave you $" + money);
201
                          money = 0;
                          System.out.println("");
202
                          break;
203
204
                      case "exit":
205
206
                          exit = 0;
207
                          break;
208
209
                      default:
210
                          break;
211
                 }
212
213
              } while (exit != 0);
214
215
         }
216 }
```

(i) New UI version is available

289 users liked this problem. 23 didn't like it. What about you?









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Solutions (255)

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Comments (214) Hints (27) Useful links (1) Solutions (255)

In this thread learners can share their solutions. Reading other people's code is an important part of becoming a developer and learning to come up with multiple solutions to a problem.

✓ Your current solution has been published successfully. Solve this problem again if you'd like to publish a new solution.

Editor's choice

JB John Backus (JetBrains Academy Team) 4 months ago Report

package machine;

Code Editor

1

Java

```
3 import java.util.Scanner;
 5 public class CoffeeMachine {
 6
 7
        public static void printAmount(int water, int milk, int beans, int cups, int money) {
            System.out.println("The coffee machine has:");
 8
            System.out.println(water + " of water");
 9
            System.out.println(milk + " of milk");
10
            System.out.println(beans + " of coffee beans");
11
            System.out.println(cups + " of disposable cups");
12
13
            System.out.println(money + " of money");
14
15
        public static boolean isOutOfResources(int water, int milk, int beans, int cups, String option) {
16
            if (cups - 1 < 0) {
17
18
                System.out.println("Sorry, not enough disposable cups!");
19
                return true;
20
            } else {
                switch (option) {
21
22
                    case "1":
23
                        if (water - 250 < 0) {
                            System.out.println("Sorry, not enough water!");
24
25
                            return true;
26
27
                        if (beans - 16 < 0) {
28
                            System.out.println("Sorry, not enough coffee beans!");
29
                            return true;
30
                        }
                        break;
31
                    case "2":
32
33
                        if (water - 350 < 0) {
                                                                                i New UI version is available
                            System.out.println("Sorry, not enough water!");
34
35
                            return true;
                                                                                                Refresh page
36
37
                        if (milk - 75 < 0) {
```

```
38
                              System.out.println("Sorry, not enough milk!");
 39
                              return true;
 40
                          }
 41
                          if (beans - 20 < 0) {
 42
                              System.out.println("Sorry, not enough coffee beans!");
                              return true;
 43
 44
                          }
                          break;
 45
                      case "3":
 46
 47
                          if (water - 200 < 0) {
                              System.out.println("Sorry, not enough water!");
 48
 49
                              return true;
 50
                          }
                          if (milk - 100 < 0) {
 51
                              System.out.println("Sorry, not enough milk!");
 52
 53
                              return true;
 54
                          }
                          if (beans - 12 < 0) {
 55
                              System.out.println("Sorry, not enough coffee beans!");
 56
 57
                              return true;
 58
                          }
 59
                          break;
 60
                  }
 61
             }
 62
             return false;
 63
         }
 64
         public static void main(String[] args) {
 65
             Scanner scanner = new Scanner(System.in);
 66
 67
             String action;
 68
             boolean on = true;
 69
 70
             int water = 400;
 71
             int milk = 540;
 72
             int beans = 120;
 73
             int cups = 9;
 74
             int money = 550;
 75
 76
             while (on) {
                 System.out.println("Write action (buy, fill, take, remaining, exit): ");
 77
                 action = scanner.nextLine();
 78
 79
                 System.out.println(action);
 80
 81
                  switch (action) {
                      /* ===== BUY OPTION ==== */
 82
 83
                      case "buy":
 84
                          System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, bac
                          String buyOption = scanner.nextLine();
 85
 86
                          if (buyOption.equals("1") || buyOption.equals("2") || buyOption.equals("3")) {
 87
                              if (isOutOfResources(water, milk, beans, cups, buyOption)) {
 88
     //System.out.println("MOIÔ");
 89
 90
                                  break;
 91
                              } else {
 92
                                  System.out.println("I have enough resources, making you a coffee!");
 93
                              }
 94
                          }
 95
 96
                          switch (buyOption) {
                              case "1": //espresso
 97
 98
                                  water -= 250;
 99
                                  beans -= 16;
100
                                  cups--;
                                  money += 4;
101
                                  break;
102
103
                              case "2": //latte
104
                                  water -= 350;
                                  milk -= 75;
105
106
                                  beans -= 20;
107
                                  cups--;
108
                                  money += 7;
109
                                  break;
                              case "3": //cappuccino
110
111
                                  water -= 200;
112
                                  milk -= 100;
113
                                  beans -= 12;
                                  cups--;
114
                                  money += 6;
115
116
                                  break;
117
                              case "back":
118
                                  break;
119
                              default:
                                                                                   i New UI version is available
120
                                  break;
121
                          }
                                                                                                  Refresh page
122
                          break;
```

123

```
/* ===== FILL OPTION ==== */
124
125
                     case "fill":
                         System.out.println("Write how many ml of water do you want to add: ");
126
127
                         water += scanner.nextInt();
128
                         System.out.println("Write how many ml of milk do you want to add: ");
129
                         milk += scanner.nextInt();
                         System.out.println("Write how many grams of coffee beans do you want to add: ");
130
131
                         beans += scanner.nextInt();
                         System.out.println("Write how many disposable cups of coffee do you want to add: ");
132
133
                         cups += scanner.nextInt();
134
                         break;
135
                     /* ==== TAKE OPTION ==== */
136
137
                     case "take":
                         System.out.println("I gave you $" + money);
138
139
                         money = 0;
140
                         break;
141
                     /* ===== REMAINING OPTION ==== */
142
143
                     case "remaining":
                         printAmount(water, milk, beans, cups, money);
144
145
                         break;
146
                     /* ===== REMAINING OPTION ==== */
147
                     case "exit":
148
149
                         on = false;
150
                         break;
151
                     default:
                         break;
152
153
                 }
154
             }
155
         }
156 }
157
```

2 <u>Reply</u>

NC Nayan Chaudhari 27 days ago Report

even modertor solution failed, i wasted my 100 jem for solution and getting the same error

O Reply



Yash verma 18 days ago Report

check mine, simply and logical:

Scanner scanner = new Scanner(System.in);

int currentWater = 400;

int currentMilk = 540;

int currentCoffeeBeans = 120;

O Show all Reply

Sort by: Last posted ▼



Jesús Garcia less than a minute ago My solution

Pofroch no

(i) New UI version is available

Code Editor

Look at other solutions to this problem

Java

```
1 package machine;
    import java.util.Scanner;
 3
 4
     public class CoffeeMachine {
 5
           public static int water = 400;
           public static int milk = 540;
 6
 7
           public static int coffeBeans = 120;
 8
           public static int disposableCups = 9;
 9
           public static int money = 550;
10
           public static String action = "";
11
           public static int coffeChoise = 0;
           public static int exit = 1;
12
13
14
           public static void supplyUpdate() {
15
                 System.out.println("The coffee machine has:\n" +
                             water + " of water\n" +
16
17
                             milk + " of milk n" +
18
                             coffeBeans + " of coffe beans\n" +
                             disposableCups + " of disposable cups\n" +
19
20
                             money + " of money");
21
           }
22
23
           public static void isAvaible() {
24
25
                 if (coffeChoise == 1) {
26
                       if (water >= 250 && coffeBeans >= 16 && disposableCups >= 1) {
                             System.out.println("I have enough resources, making you a coffee!");
27
                       } else if (water < 250 && coffeBeans >= 16 && disposableCups >= 1) {
28
                             System.out.println("Sorry, not enough water!");
29
                       } else if (water >= 250 && coffeBeans < 16 && disposableCups >= 1) {
30
                             System.out.println("Sorry, not enough coffe beans!");
31
                       } else if (water >= 250 && coffeBeans >= 16 && disposableCups < 1) {</pre>
32
33
                             System.out.println("Sorry, not enough disposable cups!");
34
                       } else if (water < 250 && coffeBeans < 16 && disposableCups >= 1) {
                             System.out.println("Sorry, not enough water and coffe beans!");
35
                       } else if (water < 250 && coffeBeans >= 16 && disposableCups < 1) {
36
37
                             System.out.println("Sorry, not enough water and disposable cups!");
                       } else if (water >= 250 && coffeBeans < 16 && disposableCups < 1) {
38
39
                             System.out.println("Sorry, not enough coffe beans and disposable cups!");
40
                       } else if (water < 250 && coffeBeans < 16 && disposableCups < 1) {
41
                             System.out.println("Sorry, not enough resources!");
42
                       }
43
                 } else if (coffeChoise == 2) {
44
45
                       if (water >= 350 && milk >= 75 && coffeBeans >= 20 && disposableCups >= 1) {
                             System.out.println("I have enough resources, making you a coffee!");
46
47
                       } else if (water < 350 && milk >= 75 && coffeBeans >= 20 && disposableCups >= 1) {
48
                             System.out.println("Sorry, not enough water!");
                       } else if (water >= 350 && milk < 75 && coffeBeans >= 20 && disposableCups >= 1) {
49
50
                             System.out.println("Sorry, not enough milk!");
51
                       } else if (water >= 350 && milk >= 75 && coffeBeans < 20 && disposableCups >= 1) {
52
                             System.out.println("Sorry, not enough coffe beans!");
53
                       } else if (water >= 350 && milk >= 75 && coffeBeans >= 20 && disposableCups < 1) {
                             System.out.println("Sorry, not enough disposable cups!");
54
55
                       } else if (water < 350 && milk < 75 && coffeBeans >= 20 && disposableCups >= 1) {
                             System.out.println("Sorry, not enough water and milk!");
56
57
                       } else if (water < 350 && milk >= 75 && coffeBeans < 20 && disposableCups >= 1) {
                             System.out.println("Sorry, not enough water and coffe beans!");
58
                       } else if (water < 350 && milk >= 75 && coffeBeans >= 20 && disposableCups < 1) {
59
                             System.out.println("Sorry, not enough water and disposable cups!");
60
61
                       } else if (water >= 350 && milk < 75 && coffeBeans < 20 && disposableCups >= 1) {
                             System.out.println("Sorry, not enough milk and coffe beans!");
62
                       } else if (water >= 350 && milk < 75 && coffeBeans >= 20 && disposableCups < 1) {
63
                             System.out.println("Sorry, not enough milk and disposable cups!");
64
                       } else if (water >= 350 && milk >= 75 && coffeBeans < 20 && disposableCups < 1) {
65
                             System.out.println("Sorry, not enough coffe beans and disposable cups!");
66
                       } else if (water < 350 && milk < 75 && coffeBeans < 20 && disposableCups >= 1) {
67
68
                             System.out.println("Sorry, not enough water, milk and coffe beans!");
                       } else if (water < 350 && milk >= 75 && coffeBeans < 20 && disposableCups < 1) {
69
70
                             System.out.println("Sorry, not enough water, coffe beans and disposable cups!");
                       } else if (water < 350 && milk < 75 && coffeBeans >= 20 && disposableCups < 1) {
71
72
                             System.out.println("Sorry, not enough water, milk and disposable cups!");
73
                       } else if (water < 350 && milk < 75 && coffeBeans < 20 && disposableCups < 1) {
74
                             System.out.println("Sorry, not enough resources!");
75
                 } else if (coffeChoise == 3) {
76
77
                       if (water >= 200 && milk >= 100 && coffeBeans >= 12 && disposableCups >= 1) {
78
                             System.out.println("I have enough resources, making you a coffee!");
                       } else if (water < 200 && milk >= 100 && coffeBeans >= 12 && الله عدماعالم عماله المعالمة عماله المعالمة عماله المعالمة عماله المعالمة المعالمة عماله المعالمة المعا
79
                                                                                                                 (i) New UI version is available
                             System.out.println("Sorry, not enough water!");
80
                       } else if (water >= 200 && milk < 100 && coffeBeans >= 12 &&
81
                             System.out.println("Sorry, not enough milk!");
82
                                                                                                                                        Refresh page
                       } else if (water >= 200 && milk >= 100 && coffeBeans < 12 &&</pre>
83
```

Custom out nnintln/"Connu not anough coffe heans!" 1.

```
Implement - On a coffee loop - Coffee Machine - JetBrains Academy
                      System.out.printing sorry, not enough corre beans: /,
 04
 85
                 } else if (water >= 200 && milk >= 100 && coffeBeans >= 12 && disposableCups < 1) {
 86
                     System.out.println("Sorry, not enough disposable cups!");
 87
                 } else if (water < 200 && milk < 100 && coffeBeans >= 12 && disposableCups >= 1) {
 88
                     System.out.println("Sorry, not enough water and milk!");
                 } else if (water < 200 && milk >= 100 && coffeBeans < 12 && disposableCups >= 1) {
 89
                     System.out.println("Sorry, not enough water and coffe beans!");
 90
                 } else if (water < 200 && milk >= 100 && coffeBeans >= 12 && disposableCups < 1) {
 91
 92
                     System.out.println("Sorry, not enough water and disposable cups!");
 93
                 } else if (water >= 200 && milk < 100 && coffeBeans < 12 && disposableCups >= 1) {
 94
                     System.out.println("Sorry, not enough milk and coffe beans!");
 95
                 } else if (water >= 200 && milk < 100 && coffeBeans >= 12 && disposableCups < 1) {
 96
                     System.out.println("Sorry, not enough milk and disposable cups!");
 97
                 } else if (water >= 200 && milk >= 100 && coffeBeans < 12 && disposableCups < 1) {
 98
                     System.out.println("Sorry, not enough coffe beans and disposable cups!");
 99
                 } else if (water < 200 && milk < 100 && coffeBeans < 12 && disposableCups >= 1) {
100
                      System.out.println("Sorry, not enough water, milk and coffe beans!");
                 } else if (water < 200 && milk >= 100 && coffeBeans < 12 && disposableCups < 1) {
101
102
                     System.out.println("Sorry, not enough water, coffe beans and disposable cups!");
                 } else if (water < 200 && milk < 100 && coffeBeans >= 12 && disposableCups < 1) {
103
                     System.out.println("Sorry, not enough water, milk and disposable cups!");
104
105
                 } else if (water < 200 && milk < 100 && coffeBeans < 12 && disposableCups < 1) {
106
                     System.out.println("Sorry, not enough resources!");
107
108
             }
109
110
         }
111
112
         public static void main(String[] args) {
113
114
              do {
115
                 Scanner scanner = new Scanner(System.in);
                 System.out.println("Write action (buy, fill, take, remaining, exit):");
116
117
                 String action = scanner.nextLine();
118
                  System.out.println("");
119
120
                 switch (action) {
121
                     case "remaining":
122
123
                          supplyUpdate();
                          System.out.println("");
124
125
                          break;
126
                     case "buy":
127
128
                         System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, bac
                         String choise = scanner.nextLine();
129
130
131
                          if (choise.length() == 1) {
132
                              coffeChoise = Integer.parseInt(choise);
                         } else {
133
                              System.out.println("");
134
135
                              break;
136
                          }
137
138
                          switch (coffeChoise) {
139
                              case 1:
140
141
                                  if (water >= 250 && coffeBeans >= 16 && disposableCups >= 1) {
142
                                      water -= 250;
                                      coffeBeans -= 16;
143
144
                                      money += 4;
145
                                      disposableCups -= 1;
                                      System.out.println("");
146
147
                                  }
148
                                  break;
149
                              case 2:
150
                                  if (water \geq 350 && milk \geq 75 && coffeBeans \geq 20 && disposableCups \geq 1) {
151
                                      water -= 350;
152
153
                                      milk -= 75;
154
                                      coffeBeans -= 20;
155
                                      money += 7;
156
                                      disposableCups -= 1;
                                      System.out.println("");
157
158
                                  }
159
                                  break;
                              case 3:
160
161
                                  isAvaible();
                                  if (water \geq 200 && milk \geq 100 && coffeBeans \geq 12 && disposableCups \geq 1) {
162
                                      water -= 200;
163
                                      milk -= 100;
164
165
                                      coffeBeans -= 12;
                                                                                  (i) New UI version is available
166
                                      money += 6;
167
                                      disposableCups -= 1;
                                      System.out.println("");
168
                                                                                                  Refresh page
                                  }
169
```

170

hnaak

```
Implement – On a coffee loop – Coffee Machine – JetBrains Academy
T/A
                                  υι eak ;
171
172
                              case 4:
173
                                  System.out.println("");
174
                                  break;
175
176
                              default:
177
                                  break;
178
                         }
179
                     break;
180
181
182
                     case "fill":
183
                         System.out.println("Write how many ml of water do you want to add:");
184
                         int waterSupply = scanner.nextInt();
185
                         water += waterSupply;
186
                         System.out.println("Write how many ml of milk do you want to add: ");
                         int milkSupply = scanner.nextInt();
187
188
                         milk += milkSupply;
189
                         System.out.println("Write how many grams of coffee beans do you want to add: ");
190
                          int coffeBeansSupply = scanner.nextInt();
                          coffeBeans += coffeBeansSupply;
191
192
                         System.out.println("Write how many disposable cups of coffee do you want to add: ");
193
                         int disposableCupsSupply = scanner.nextInt();
194
                         disposableCups += disposableCupsSupply;
195
                          System.out.println("");
196
                          break;
197
                     case "take":
198
199
```

Complete a stage of your project during the trial and get a free month.

System.out.println("");

Find out more.

200

```
Study plan
               Map
                         Projects
    208
                         default:
    209
    210
                             break;
    211
    212
                     }
    213
    214
                  } while (exit != 0);
    215
             }
    216 }
```

System.out.println("I gave you \$" + money);

✓ Correct ◯ 0 Reply

User 46913581 about 6 hours ago Report

(i) New UI version is available

Refresh page

Code Editor

```
package machine;
1
2
3 import java.util.Scanner;
    public class CoffeeMachine {
        int water = 400;
        int milk = 540;
7
        int beans = 120;
8
9
        int cups = 9;
10
        int money = 550;
11
12
        public static void main(String[] args) {
13
            CoffeeMachine cm = new CoffeeMachine();
14
            cm.initInteractiveInput();
15
16
        public void initInteractiveInput() {
            Scanner in = new Scanner(System.in);
17
18
            boolean isExiting = false;
            while(!isExiting) {
19
20
                System.out.println();
21
                System.out.println("Write action (buy, fill, take, remaining, exit):");
22
                System.out.print("> ");
23
                String action = in.next();
24
25
                isExiting = modifyState(action,in);
26
            }
27
            in.close();
28
        }
29
        private void printState() {
            System.out.println("The coffee machine has:");
30
            System.out.println(this.water + " of water");
31
32
            System.out.println(this.milk + " of milk");
33
            System.out.println(this.beans + " of coffee beans");
34
            System.out.println(this.cups + " of disposable cups");
35
            System.out.println("$" + this.money + " of money");
36
37
        private void fulfillOrder(int water, int milk, int beans, int money) {
38
            if (cups > 0 && this.water - water >= 0 && this.milk - milk >= 0 && this.beans - beans >= 0) {
39
                System.out.println("I have enough resources, making you a coffee!");
                this.cups--;
40
41
                this.water -= water;
42
                this.milk -= milk;
43
                this.beans -= beans;
44
                this.money += money;
45
46
                System.out.println("Sorry, not enough " +
47
                        (cups <= 0 ? "cups" : this.water - water < 0 ? "water" : this.milk - milk < 0 ? "milk" :
                        + "!"
48
49
                );
50
            }
51
52
        private boolean modifyState(String action, Scanner in) {
53
            System.out.println();
54
            switch (action) {
55
                case "buy":
                    System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, back -
56
57
                    System.out.print("> ");
58
                    switch (in.next()) {
                        case "1":
59
                            fulfillOrder(250,0,16,4);
60
61
                            break;
                        case "2":
62
63
                            fulfillOrder(350,75,20,7);
64
                            break;
                        case "3":
65
66
                            fulfillOrder(200,100,12,6);
67
                            break;
                        case "back":
68
69
                            return false;
70
                        default:
71
                            break;
                    }
72
73
                    break;
74
                case "fill":
75
                    System.out.println("Write how many ml of water do you want to add:");
76
                    System.out.print("> ");
77
                    this.water += in.nextInt();
78
79
                    System.out.println("Write how many ml of milk do you want to add:");
                    System.out.print("> ");
80
                    this.milk += in.nextInt();
81
82
                                                                                 (i) New UI version is available
83
                    System.out.println("Write how many grams of coffee beans
                    System.out.print("> ");
84
                                                                                                Refresh page
85
                    this.beans += in.nextInt();
86
```

```
87
                     System.out.println("Write how many disposable cups of coffee do you want to add:");
 88
                     System.out.print("> ");
                     this.cups += in.nextInt();
 89
 90
                     break;
                 case "take":
 91
 92
                     System.out.println("I gave you $" + this.money);
 93
                     this.money = 0;
 94
                     break;
 95
                 case "remaining":
                     this.printState();
 96
 97
                     break;
 98
                  case "exit":
 99
                     return true;
100
                 default:
101
                     break;
102
             }
103
             return false;
104
         }
105
     }
106
```

○ 0 Reply

D DdiavaLL 1 day ago Report

Code Editor

1 package machine; 2 import java.util.Scanner; 3 public class CoffeeMachine { 4 5 public static int water = 400; public static int milk = 540; 6 7 public static int beans = 120; 8 public static int cups = 9; public static int money = 550; 9 10 11 // The method checks the number of ingredients for coffee public static String check(int number) { 12 String rez = ""; 13 switch (number) { 14 15 case 1: 16 if (water < 250) { rez += "water"; 17 18 } else if (beans < 16) { rez += "coffee beans"; 19 20 } else if (cups < 1) {</pre> 21 rez += "disposable cups"; 22 } 23 break; 24 case 2: if (water < 350) { 25 26 rez += "water"; } else if (milk < 75) {</pre> 27 28 rez += "milk";

} else if (beans < 16) {</pre>

} else if (cups < 1) {</pre>

if (water < 200) {

rez += "water";
} else if (milk < 100) {</pre>

}

case 3:

break;

rez += "coffee beans";

rez += "disposable cups";

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Refresh page

Java

29 30

31

32

33

34

35

36

37

38

```
39
                          rez += "milk";
 40
                     } else if (beans < 12) {</pre>
 41
                          rez += "coffee beans";
 42
                     } else if (cups < 1) {
 43
                          rez += "disposable cups";
 44
                     break;
 45
                 default:
 46
 47
                     break;
 48
             }
 49
             return rez;
 50
         }
 51
 52
         // The method simulates the purchase of coffee
         public static void buy(String number) {
 53
             switch (number) {
 54
 55
                 case "1":
 56
                     if (check(1).equals("")) {
 57
                          System.out.println("I have enough resources, making you a coffee!");
 58
                          water -= 250;
 59
                          beans -= 16;
 60
                          money += 4;
 61
                          cups -= 1;
 62
 63
                          System.out.println("Sorry, not enough " + check(1) + "!");
 64
 65
                     break;
                 case "2":
 66
 67
                     if (check(2).equals("")) {
 68
                          System.out.println("I have enough resources, making you a coffee!");
 69
                          water -= 350;
 70
                          milk -= 75;
 71
                          beans -= 20;
                          money += 7;
 72
 73
                          cups -= 1;
                     } else {
 74
 75
                          System.out.println("Sorry, not enough " + check(2) + "!");
 76
 77
                     break;
                 case "3":
 78
 79
                     if (check(3).equals("")) {
                          System.out.println("I have enough resources, making you a coffee!");
 80
 81
                          water -= 200;
 82
                          milk -= 100;
 83
                          beans -= 12;
 84
                          money += 6;
 85
                          cups -= 1;
                     } else {
 86
                          System.out.println("Sorry, not enough " + check(3) + "!");
 87
 88
                     }
 89
                     break;
 90
                 case "back":
 91
                     break;
 92
                 default:
 93
                     break;
 94
             }
 95
         }
 96
 97
         // Method describing the state of the machine
 98
         public static void state() {
             System.out.println("\nThe coffee machine has:\n" + water + " of water\n" + milk + " of milk\n" + bear
 99
100
         }
101
102
         // Method describing filling in the machine
         public static void fill() {
103
104
             System.out.println("Write how many ml of water do you want to add: ");
105
             Scanner scan = new Scanner(System.in);
106
             int waterNew = scan.nextInt();
107
             water += waterNew;
108
             System.out.println("Write how many ml of milk do you want to add: ");
109
             int milkNew = scan.nextInt();
110
             milk += milkNew;
111
112
             System.out.println("Write how many grams of coffee beans do you want to add: ");
113
114
             int beansNew = scan.nextInt();
115
             beans += beansNew;
116
             System.out.println("Write how many disposable cups of coffee do you want to add: ");
117
             int cupsNew = scan.nextInt();
118
119
             cups += cupsNew;
120
         }
                                                                                  (i) New UI version is available
121
122
         // Method describing taking of money from the machine
                                                                                                  Refresh page
123
         public static void take() {
             System.out.print("I gave you $" + money);
124
```

```
125
             money = 0;
126
         }
127
128
         public static void main(String[] args) {
129
             Scanner sc = new Scanner(System.in);
130
             String action = "first";
             while (!action.equals("exit")) {
131
                 System.out.println("\nWrite action (buy, fill, take, remaining, exit): ");
132
133
                 action = sc.nextLine();
                 switch (action) {
134
135
                     case "buy":
136
                          System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino, bac
137
                          String paths = sc.next();
                          buy(paths);
138
139
                          break;
                     case "fill":
140
141
                          fill();
142
                          break;
143
                     case "take":
144
                          take();
145
                          break;
                     case "remaining":
146
147
                          state();
148
                          break;
149
                     default:
150
                          break;
151
             }
152
             }
153
         }
154
155
```

◯ 0 Reply



Code Editor

Java

```
1 package machine;
 2 import java.util.Scanner;
3
    public class CoffeeMachine {
4
        static Scanner scanner = new Scanner(System.in);
        static int money = 550;
6
7
        static int cups = 9;
8
        static int water = 400;
        static int milk = 540;
9
10
        static int beans = 120;
11
        public static void takeMoney() {
12
            System.out.println("I gave you $" + money);
13
            money = 0;
14
       }
15
        public static void info() {
16
            System.out.println("The coffee machine has:");
17
            System.out.println(milk + " of milk");
18
19
            System.out.println(water + " of water");
            System.out.println(beans + " of coffee beans");
20
21
            System.out.println(cups + " of disposable cups");
            System.out.println(money + " of money");
22
```

(i) New UI version is available

```
23
         }
 24
 25
         public static void fill() {
             System.out.println("Write how many ml of water do you want to add:");
 26
 27
             water += scanner.nextInt();
 28
             System.out.println("Write how many ml of milk do you want to add:");
 29
             milk += scanner.nextInt();
 30
             System.out.println("Write how many grams of coffee beans do you want to add:");
 31
             beans += scanner.nextInt();
 32
             System.out.println("Write how many disposable cups of coffee do you want to add:");
 33
             cups += scanner.nextInt();
 34
         }
 35
 36
         public static void buyCoffee(int option) {
 37
             --cups;
 38
             boolean success = false;
 39
             int previousWater = water;
 40
             int previousMilk = milk;
 41
             int previousBeans = beans;
             int previousMoney = money;
 42
 43
             switch (option) {
                  case 1:
 44
 45
                      water -= 250;
 46
                      beans -= 16;
 47
                      money += 4;
 48
                      break;
 49
                  case 2:
 50
                      water -= 350;
 51
                      milk -= 75;
 52
                      beans -= 20;
                      money += 7;
 53
 54
                      break;
 55
                  case 3:
 56
                      water -= 200;
 57
                      milk -= 100;
 58
                      beans -= 12;
 59
                      money += 6;
 60
                      break;
 61
                 default:
 62
                      ++cups;
                      return;
 63
 64
             }
             if (water < 0) {
 65
 66
                  System.out.println("Sorry, not enough water!");
 67
             } else if (milk < 0) {</pre>
                  System.out.println("Sorry, not enough milk!");
 68
 69
             } else if (cups < 0) {</pre>
 70
                 System.out.println("Sorry, not enough cups!");
 71
             } else if (beans < 0) {</pre>
 72
                  System.out.println("Sorry, not enough beans!");
 73
             } else {
 74
                 System.out.println("I have enough resources, making you a coffee!");
 75
                  success = true;
 76
             }
 77
             if (!success) {
 78
                 water = previousWater;
 79
                 milk = previousMilk;
                 beans = previousBeans;
 80
 81
                  ++cups;
             }
 82
 83
         }
 84
 85
 86
         public static void main(String[] args) {
 87
             String action = "";
 88
             do {
 89
                 System.out.println("Write action (buy, fill, take, remaining, exit):");
 90
                 action = scanner.next();
 91
                  switch (action) {
                      case "fill":
 92
 93
                          fill();
 94
                          break;
 95
                      case "buy":
                          System.out.println("What do you want to buy? 1 - espresso, 2 - latte, 3 - cappuccino: ")
 96
                          String coffeeSelection = scanner.next();
 97
 98
                          if (coffeeSelection.equals("back")) {
 99
                              break;
100
                          }
                          buyCoffee(Integer.parseInt(coffeeSelection));
101
102
                          break;
103
                      case "take":
                          takeMoney();
104
                                                                                   (i) New UI version is available
105
                          break;
                      case "remaining":
106
                                                                                                   Refresh page
107
                          info();
108
                          break;
```

```
109
                    case "exit":
110
                        break;
111
                    default:
112
                        System.out.println("I didn't quite understand that.");
113
114
                }
            } while (!action.equals("exit"));
115
116
        }
117 }
118
```

◯ 0 Reply

(i) New UI version is available