```
1 1×
        var getAgeFactor=function(account)
        { var factor ;
 2 16×
 3 16×
            if (account.age <0 || account.age >100)
    3×
                factor= -1;
 5 13×
            else if (account.age == 0 )
                factor = 1;
 7 11×
            else if (account.age < 2)</pre>
 8
    2×
                factor= 5;
            else if (account.age < 5 )</pre>
10 3×
                factor=10;
11 6×
            else if (account.age< 10)</pre>
12 3×
                 factor =20;
13
             else
14
    3×
                factor =50;
15 16×
             return factor;
16
        }
17
18
    1×
        var getBalanceFactor=function (account)
19 20×
            var factor;
20
            if (account.balance < -100 || account.balance > 1000000000)
21 20×
22
23 17×
             else if (account.balance >= -100 && account.balance <=0)</pre>
24
   3×
                factor = 6;
25 14×
            else if (account.balance < 1000)</pre>
26
    3×
                factor = 16;
27 11×
            else if (account.balance < 50000)</pre>
28
                factor = 30;
29
            else if (account.balance < 100000)</pre>
    8×
30
    3x
                factor = 70;
31
            else if ( account.balance <= 1000000)</pre>
    5×
                factor = 200;
32 3×
33
34
    2×
                 factor = 500;
35
36
   20×
             return factor;
37
        }
38
39
    1×
        var AccountStatus=function (account) {
40
   13×
            var factor1 = getAgeFactor(account);
            var factor2 = getBalanceFactor(account);
41 13x
            var factor3 = factor1 * factor2;
42 13×
43 13×
            if (factor3 < 0)</pre>
                return "invalid"
45 11×
            else if (factor3 <= 700)</pre>
46
                 return "poor";
47
            else
48
    8×
            if (factor3 <= 3000)
49
                return "fair";
50
            else if (factor3 <= 10000)
                return "good"
51
    3×
52
             else
                 return "very good";
53
    2×
54
55
56
    1×
        var creditStatus=function (client,creditCheckMode)
57 11× {var threshold;
            if (client.credit < 0 || client.credit >800)
58 11×
59
    2×
                 return "invalid";
60
61
    9×
            if (creditCheckMode==="restricted")
62
    4×
                 threshold=750;
    5×
             else if (creditCheckMode==="default")
63
   4×
                threshold=700;
64
65 1×
            else return "invalid";
```

```
8×
              if (client.credit < threshold)</pre>
67
68
     4×
                  return "bad";
69
     4×
              else return "good";
70
71
72
         var productStatus=function (product,store,storeThreshold)
     1×
73
74
     7×
75
     7×
              for (i=0;i<=store.length;i++)</pre>
76
77
     7×
                  if (product ===store[i].name)
78
                      q=store[i].q;
     6×
79
                  else {
                    q = 0;
80
     1×
81
     7×
                  if (q<=0)
82
                      return "sold-out";
83
     3×
84
     4×
                  else if (q <= storeThreshold)</pre>
                      return "limited"
85
     2×
86
                  else return "available"
87
88
          }
89
         var orderHandling=function(client,product,store,storeThreshold,creditCheckMode)
     1×
90
91
92
    21×
              var aStautus=AccountStatus(client);
93
    21x
              var cStatus=creditStatus(client,creditCheckMode);
    21×
94
              var pStatus=productStatus(product,store,storeThreshold);
95
              if (aStautus==="invalid"||cStatus==="invalid" ||pStatus==="invalid" )
96
    21×
97
                  return "invalid";
98
              if ((aStautus==="good")|| (aStautus==="good" && cStatus==="good")||
99
    18×
                  (aStautus!="good" && cStatus==="good" && pStatus==="available"))
100
101
                  return "accepted";
102
              else if ((aStautus==="good" && cStatus==="bad")||(aStautus==="fair" && cStatus==="bad"
103
    13×
                  && pStatus==="available"))
104
                  return "underReview";
105
     3×
106
              else if ((aStautus==="fair" && cStatus==="good" && productStatus!="available")
107
    10×
108
                  ||(aStautus==="poor" && cStatus==="good" && pStatus==="limited"))
109
     4x
                  return "pending";
110
              else if ((aStautus==="fair" && cStatus==="bad" && productStatus!="available")||(aStautus==="poor" && cStatus==="good"
111
     6×
                  && pStatus==="sold-out")||(aStautus==="poor" && cStatus==="bad" ))
112
113
                  return "rejected";
114
115
              else
                return 'invalid';
116
     1x
117
118
         }
119
```

Code coverage generated by istanbul at Wed Nov 23 2016 23:16:05 GMT-0500 (EST)