```
1
   /*F17/1760/2019 BENJAMIN OKUMU
 2 PROGRAM DETERMINES VIRAL DISEASE AS EITHER CORONAVIRUS, FLU OR COLD*/
 3 #include<iostream>
 4 using namespace std;
 5 int main()
 6
 7
    //declaring variables for count
 8
       int coronafreq=0;
 9
       int coldfreq=0;
10
       int flufreq=0;
11
       //display the symptoms
12
       cout<<"VIRAL DISEASE DETERMINER!!"<<endl;</pre>
13
       cout<<"WHICH OF THESE SYMPTOMS DO YOU EXHIBIT?"<<end1;</pre>
14
       cout<<"[1]FEVER"<<endl;</pre>
15
       cout<<"[2]FATIGUE"<<end1;</pre>
16
       cout<<"[3]COUGH"<<endl;</pre>
17
       cout<<"[4]SNEEZING"<<endl;</pre>
18
       cout<<"[5]ACHES AND PAINS"<<endl;</pre>
19
       cout<<"[6]RUNNY OR STUFFY NOSE"<<endl;</pre>
2.0
       cout<<"[7]SORE THROAT"<<endl;</pre>
21
       cout<<"[8]DIARRHEA"<<endl;</pre>
22
       cout<<"[9]HEADACHES"<<endl;</pre>
        cout<<"[10]SHORTNESS OF BREATH"<<endl;</pre>
23
24
25
        int option;
26
27
        do{
28 //user enters symptom number as per selector
29
       cout << "ENTER SYMPTOM NO:";</pre>
30
       cin>>option;
        //using if loops for each symptom, analysis of the symptoms occurs below
31
32
       if (option==1)
33
34
        {
            cout<<"ENTER SEVERITY;"<<endl;</pre>
35
            cout<<"[1]Common"<<endl;</pre>
36
            cout<<"[2]Rare"<<endl;</pre>
37
           int severity;
38
39
            cin>>severity;
40
            if(severity==1)
41
42
                 coronafreq=coronafreq+1;
43
                 flufreq=flufreq+1;
44
                 cout<<"Coronavirus or Flu"<<endl;</pre>
45
46
            else if(severity==2)
47
48
                 coldfreq=coldfreq+1;
49
                 cout<<"Cold"<<endl;</pre>
50
51
52
        else if(option==2)//fatigue
53
54
            cout<<"ENTER SEVERITY;"<<endl;</pre>
            cout<<"[1]Sometimes"<<endl;</pre>
55
            cout<<"[2]Common"<<end1;</pre>
56
57
            int severity;
            cin>>severity;
58
59
            if(severity==1)
60
61
                 coronafreq=coronafreq+1;
62
                 coldfreq=coldfreq+1;
63
                 cout<<"Coronavirus or cold"<<endl;</pre>
64
65
             else if(severity==2)
66
```

```
67
                   flufreq=flufreq+1;
 68
                   cout<<"Flu"<<endl;</pre>
 69
              }
 70
 71
          else if(option==3)//cough
 72
              cout<<"ENTER SEVERITY;"<<endl;</pre>
 73
              cout<<"[1]Common(usually dry)"<<endl;</pre>
 74
              cout<<"[2]Dry"<<endl;</pre>
 75
 76
              int severity;
 77
              cin>>severity;
 78
              if(severity==1)
 79
                   coronafreq=coronafreq+1;
 80
 81
                   flufreq=flufreq+1;
 82
                   cout<<"Coronavirus or Flu"<<endl;</pre>
 83
 84
              else if(severity==2)
 85
 86
                   coldfreq=coldfreq+1;
 87
                   cout<<"Cold"<<endl;</pre>
 88
 89
          else if(option==4)//sneezing
 90
 91
              cout<<"ENTER SEVERITY;"<<endl;</pre>
 92
 93
              cout<<"[1]None"<<endl;</pre>
 94
              cout<<"[2]Common"<<endl;</pre>
 95
              int severity;
 96
              cin>>severity;
 97
              if(severity==1)
 98
 99
                   coronafreq=coronafreq+1;
100
                   flufreq=flufreq+1;
101
                   cout<<"Coronavirus or Flu"<<endl;</pre>
102
103
              else if(severity==2)
104
105
                   coldfreq=coldfreq+1;
106
                   cout<<"Cold"<<endl;</pre>
107
108
109
          else if(option==5)//aches and pains
110
111
              cout<<"ENTER SEVERITY;"<<endl;</pre>
112
              cout<<"[1]Sometimes"<<endl;</pre>
113
              cout<<"[2]Common"<<end1;</pre>
114
              int severity;
              cin>>severity;
115
116
              if(severity==1)
117
118
                   coronafreq=coronafreq+1;
119
                   cout<<"Coronavirus"<<endl;</pre>
120
              else if(severity==2)
121
122
                   coldfreq=coldfreq+1;
123
                   flufreq=flufreq+1;
124
                   cout<<"Cold of flu"<<endl;</pre>
125
126
              }
127
128
          else if(option==6)//runny or stuffy nose
129
130
              cout<<"ENTER SEVERITY;"<<endl;</pre>
131
              cout<<"[1]Rare"<<endl;</pre>
132
              cout<<"[2]Common"<<end1;</pre>
```

```
133
              cout<<"[3]Sometimes"<<endl;</pre>
134
              int severity;
135
              cin>>severity;
136
              if(severity==1)
137
                  coronafreq=coronafreq+1;
138
139
                  cout<<"Corona virus"<<endl;</pre>
140
141
              else if(severity==2)
142
143
                  coldfreq=coldfreq+1;
144
                  cout<<"Cold"<<endl;</pre>
145
146
              else if(severity==3)
147
148
                  flufreq=flufreq+1;
149
                  cout<<"Flu"<<endl;</pre>
150
151
152
         else if (option==7)//sorethroat
153
154
              cout<<"ENTER SEVERITY;"<<endl;</pre>
              cout<<"[1]Sometimes"<<endl;</pre>
155
              cout<<"[2]Common"<<end1;</pre>
156
157
              int severity;
158
              cin>>severity;
159
              if(severity==1)
160
161
                  coronafreq=coronafreq+1;
                  flufreq=flufreq+1;
162
                  cout<<"Coronavirus or Flu"<<endl;</pre>
163
164
165
              else if(severity==2)
166
167
                  coldfreq=coldfreq+1;
168
                  cout<<"Cold"<<endl;</pre>
169
170
171
          else if(option==8)//diarrhea
172
173
              cout<<"ENTER SEVERITY;"<<endl;</pre>
174
              cout<<"[1]Rare"<<endl;</pre>
175
              cout<<"[2]No"<<endl;
176
              cout<<"[3]Sometimes(children)"<<endl;</pre>
177
              int severity;
178
              cin>>severity;
179
              if(severity==1)
180
181
                  coronafreq=coronafreq+1;
182
                  cout<<"Coronavirus"<<endl;</pre>
183
184
              else if(severity==2)
185
186
                  coldfreq=coldfreq+1;
                  cout<<"Cold"<<endl;</pre>
187
188
              else if(severity==3)
189
190
191
                  flufreq=flufreq+1;
                  cout<<"Flu"<<endl;</pre>
192
193
194
195
          else if(option==9)//headaches
196
197
              cout<<"ENTER SEVERITY;"<<end1;</pre>
198
              cout<<"[1]Sometimes"<<endl;</pre>
```

```
199
             cout<<"[2]Rare"<<endl;</pre>
200
              cout<<"[3]Common"<<end1;</pre>
201
             int severity;
202
             cin>>severity;
203
             if(severity==1)
204
205
                  coronafreq=coronafreq+1;
206
                  cout<<"Coronavirus"<<endl;</pre>
207
208
              else if(severity==2)
209
210
                  coldfreq=coldfreq+1;
211
                  cout<<"Cold"<<endl;</pre>
212
213
              else if(severity==3)
214
215
                  flufreq=flufreq+1;
216
                  cout<<"Flu"<<endl;</pre>
217
218
219
         else//shortness of breath
220
221
              cout<<"ENTER SEVERITY;"<<endl;</pre>
             cout<<"[1]Sometimes"<<endl;</pre>
222
             cout<<"[2]No"<<endl;
223
224
             int severity;
225
             cin>>severity;
226
             if(severity==1)
227
228
                  coronafreq=coronafreq+1;
229
                  cout<<"Coronavirus"<<endl;</pre>
230
              else if(severity==2)
231
232
233
                  coldfreq=coldfreq+1;
234
                  flufreq=flufreq+1;
235
                  cout<<"Cold or flu"<<endl;</pre>
236
237
238
239
         }while(option<=9);</pre>
          //Diagnosis and ailment declaration
240
241
         if(coronafreq>coldfreq)
242
243
              if(coronafreq>flufreq)
244
245
                  cout<<"CORONA VIRUS:POSITIVE"<<endl;</pre>
246
247
248
         else if(coronafreq<coldfreq)</pre>
249
250
             cout<< "COLD: POSITIVE" << endl;</pre>
251
252
         else
253
              cout<<"FLU:POSITIVE"<<endl;</pre>
254
255
         cout<< "NOTE THAT A PATIENT MAY SUFFER EITHER FLU OR COLD AS CORONA VIRUS SYMPTOMS!!"<<endl;</pre>
256
257 }
```