```cpp
/*F17/1760/2019 BENJAMIN OKUMU
PROGRAM DETERMINES VIRAL DISEASE AS EITHER CORONAVIRUS, FLU OR COLD*/
#include<iostream>
using namespace std;
int main()
{

    int coronafreq=0;
    int coldfreq=0;
    int flufreq=0;
    //display the symptoms
    cout<<"VIRAL DISEASE DETERMINER!!"<<endl;
    cout<<"WHICH OF THESE SYMPTOMS DO YOU EXHIBIT?"<<endl;
    cout<<"[1]FEVER"<<endl;
    cout<<"[2]FATIGUE"<<endl;
    cout<<"[3]COUGH"<<endl;
    cout<<"[4]SNEEZING"<<endl;
    cout<<"[5]ACHES AND PAINS"<<endl;
    cout<<"[6]RUNNY OR STUFFY NOSE"<<endl;
    cout<<"[7]SORE THROAT"<<endl;
    cout<<"[8]DIARRHEA"<<endl;
    cout<<"[9]HEADACHES"<<endl;
    cout<<"[10]SHORTNESS OF BREATH"<<endl;

    int option;
    int i;
    do{
    cout<<"ENTER SYMPTOM NO:";
    cin>>option;
    //using if loops for each symptom, analysis of the symptoms occurs below
    if (option==1)
    {
        cout<<"ENTER SEVERITY;"<<endl;
        cout<<"[1]Common"<<endl;
        cout<<"[2]Rare"<<endl;
        int severity;
        cin>>severity;
        if(severity==1)
        {
            coronafreq=coronafreq+1;
            flufreq=flufreq+1;
            cout<<"Coronavirus or Flu"<<endl;
        }
        else if(severity==2)
        {
            coldfreq=coldfreq+1;
            cout<<"Cold"<<endl;
        }
    }
    else if(option==2)
    {
        cout<<"ENTER SEVERITY;"<<endl;
        cout<<"[1]Sometimes"<<endl;
        cout<<"[2]Common"<<endl;
        int severity;
        cin>>severity;
        if(severity==1)
        {
            coronafreq=coronafreq+1;
            coldfreq=coldfreq+1;
            cout<<"Coronavirus or cold"<<endl;
        }
        else if(severity==2)
        {
            flufreq=flufreq+1;
            cout<<"Flu"<<endl;
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67            }
68        }
69        else if(option==3)
70        {
71            cout<<"ENTER SEVERITY;"<<endl;
72            cout<<"[1]Common(usually dry)"<<endl;
73            cout<<"[2]Dry"<<endl;
74            int severity;
75            cin>>severity;
76            if(severity==1)
77            {
78                coronafreq=coronafreq+1;
79                flufreq=flufreq+1;
80                cout<<"Coronavirus or Flu"<<endl;
81            }
82            else if(severity==2)
83            {
84                coldfreq=coldfreq+1;
85                cout<<"Cold"<<endl;
86            }
87        }
88        else if(option==4)
89        {
90            cout<<"ENTER SEVERITY;"<<endl;
91            cout<<"[1]None"<<endl;
92            cout<<"[2]Common"<<endl;
93            int severity;
94            cin>>severity;
95            if(severity==1)
96            {
97                coronafreq=coronafreq+1;
98                flufreq=flufreq+1;
99                cout<<"Coronavirus or Flu"<<endl;
100           }
101           else if(severity==2)
102           {
103               coldfreq=coldfreq+1;
104               cout<<"Cold"<<endl;
105           }
106       }
107       else if(option==5)
108       {
109           cout<<"ENTER SEVERITY;"<<endl;
110           cout<<"[1]Sometimes"<<endl;
111           cout<<"[2]Common"<<endl;
112           int severity;
113           cin>>severity;
114           if(severity==1)
115           {
116               coronafreq=coronafreq+1;
117               cout<<"Coronavirus"<<endl;
118           }
119           else if(severity==2)
120           {
121               coldfreq=coldfreq+1;
122               flufreq=flufreq+1;
123               cout<<"Cold of flu"<<endl;
124           }
125       }
126       else if(option==6)
127       {
128           cout<<"ENTER SEVERITY;"<<endl;
129           cout<<"[1]Rare"<<endl;
130           cout<<"[2]Common"<<endl;
131           cout<<"[3]Sometimes"<<endl;
132           int severity;
```

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

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        int severity;
        cin>>severity;
        if(severity==1)
        {
            coronafreq=coronafreq+1;
            cout<<"Coronavirus"<<endl;
        }
        else if(severity==2)
        {
            coldfreq=coldfreq+1;
            cout<<"Cold"<<endl;
        }
        else if(severity==3)
        {
            flufreq=flufreq+1;
            cout<<"Flu"<<endl;
        }
    }
    else
    {
        cout<<"ENTER SEVERITY;"<<endl;
        cout<<"[1]Sometimes"<<endl;
        cout<<"[2]No"<<endl;
        int severity;
        cin>>severity;
        if(severity==1)
        {
            coronafreq=coronafreq+1;
            cout<<"Coronavirus"<<endl;
        }
        else if(severity==2)
        {
            coldfreq=coldfreq+1;
            flufreq=flufreq+1;
            cout<<"Cold or flu"<<endl;
        }
    }

    }while(option<=9);
    //Diagnosis and ailment declaration
    if(coronafreq>coldfreq)
    {
        if(coronafreq>flufreq)
        {
            cout<<"CORONA VIRUS:POSITIVE"<<endl;
        }
    }
    else if(coronafreq<coldfreq)
    {
        cout<<"COLD:POSITIVE"<<endl;
    }
    else
    {
        cout<<"FLU:POSITIVE"<<endl;
    }
    cout<<"NOTE THAT A PATIENT MAY SUFFER EITHER FLU OR COLD AS CORONA VIRUS SYMPTOMS!!"<<endl;
}
```