Lab 22

```c
1   #include <stdio.h>
2   main()
3   {
4
5       float speed = 0;
6       int finish = 0;
7       char con = 'y';
8
9       while (con == 'y')
10      {
11          printf("Please enter Wind Speed (knots) : ");
12          scanf("%f", &speed);
13          printf("\n");
14          if (speed < 0)
15          {
16              printf("\"Enter more than or equal 0\"\n");
17          }
18
19          if (speed >= 0 && speed < 1.00 && finish == 0)
20          {
21              printf(" Description : Calm");
22              finish = 1;
23              speed = 0;
24          }
25          if (speed >= 1.00 && speed < 3.5 && finish == 0)
26          {
27              printf("Description : Light Air");
28              finish = 1;
```

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29          speed = 0;
30      }
31      if (speed >= 3.5 && speed < 27.5 && finish == 0)
32      {
33          printf("Description : Breeze");
34          finish = 1;
35          speed = 0;
36      }
37      if (speed >= 27.5 && speed < 47.5 && finish == 0)
38      {
39          printf("Description : Gale");
40          finish = 1;
41          speed = 0;
42      }
43      if (speed >= 47.5 && speed < 63.5 && finish == 0)
44      {
45          printf("Description : Storm");
46          finish = 1;
47          speed = 0;
48      }
49      if (speed >= 63.5 && finish == 0)
50      {
51          printf("Description : Hurricane");
52          finish = 1;
53          speed = 0;
54      }
55      printf("\n\n");
56      while (finish == 1)
57      {
58          printf("Continue Program ?(y/N) :");
```

```
59          scanf(" %c", &con);
60          printf("\n");
61          if (con == 'y' || con == 'N')
62          {
63              finish = 0;
64          }
65          else
66          {
67              printf("\"Enter 'y' or 'N' only\"\n\n");
68              finish = 1;
69          }
70      }
71      while (con == 'N')
72      {
73          printf("\"End Program\"\n\n");
74          break;
75      }
76      speed = 0;
77   }
78 }
```