Advanced C-Lab Fat

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Question-1

code

```
1
     #include<stdio.h>
 2
     #include <stdlib.h>
 3
     #include<string.h>
 4
 5
     struct date
 6
   ₽{
 7
          int day;
 8
          int month;
 9
          int year;
    <sup>⊥</sup>};
10
11
12
    struct vaccine {
13
       char vaccine_name[100];
14
       int id;
15
       char porduction_company[100];
16
       char manufacture_date[100];
17
       char expiry_date[100];
18
       int package_no;
19
       char package_status[100];
20
    L};
21
22
     // id's of the vaccine administered first with open and then not open
23
         void id_vaccine( struct vaccine *ptr) {
24
         printf("\nid's of the vaccine administered first with open and then not open\n");
25
         int max=-9999;
         printf("Package --> open\n");
26
27
          for(int i=0;i<4;i++) {
              if((ptr[i].id>max) && strcmp(ptr[i].package_status,"open")) {
28
29
                  max = ptr[i].id;
30
                  printf("%d ",ptr[i].id);
```

```
31
                printf("%s",ptr[i].vaccine_name);
32
                printf("\n");
33
            }
        }
34
35
36
        int min=9999;
        printf("\nPackage --> not open\n");
37
38
        for(int i=0;i<4;i++) {
39
            if((ptr[i].id<min) && strcmp(ptr[i].package_status,"not open")) {</pre>
40
                min = ptr[i].id;
                printf("%d ",ptr[i].id);
41
                printf("%s",ptr[i].vaccine name);
42
43
                printf("\n");
44
            }
45
46
47
48
49
   pint main() {
50
      int count=5;
51
       struct vaccine *obj1 = malloc(sizeof(struct vaccine) * count);
52
53
      strcpy(obj1[0].vaccine_name,"Covaxin");
54
      obi1[0].id = 1;
55
      strcpy(obj1[0].porduction_company,"abc");
56
      strcpy(obj1[0].manufacture_date,"12/4/2020");
57
      strcpy(obj1[0].expiry date,"12/4/2020");
58
      obj1[0].package_no = 10;
59
      strcpy(obj1[0].package status,"open");
60
61
    62
      strcpy(obj1[1].vaccine_name,"Covishield");
      obj1[1].id = 2;
63
      strcpy(obj1[1].porduction_company,"efg");
64
65
      strcpy(obj1[1].manufacture_date,"24/7/2020");
66
      strcpy(obj1[1].expiry_date,"12/8/2021");
67
      obj1[1].package_no = 20;
68
      strcpy(obj1[1].package status,"not open");
69
70
      71
72
        strcpy(obj1[2].vaccine_name,"pfizer");
73
      obj1[2].id = 3;
74
      strcpy(obj1[2].porduction company,"ijk");
      strcpy(obj1[2].manufacture_date,"15/3/2020");
75
```

```
76
      strcpy(obj1[2].expiry_date,"10/8/2021");
77
      obj1[2].package no = 30;
78
      strcpy(obj1[2].package_status,"open");
79
80
      81
82
       strcpy(obj1[3].vaccine_name,"retro");
83
      obj1[3].id = 3;
      strcpy(obj1[3].porduction_company,"pqr");
84
85
      strcpy(obj1[3].manufacture date,"12/4/2020");
86
      strcpy(obj1[3].expiry date,"22/6/2021");
87
      obj1[3].package_no = 40;
88
      strcpy(obj1[3].package status,"not open");
89
90
      91
 92
       strcpy(obj1[4].vaccine_name,"asimmo");
 93
       obj1[4].id = 1;
 94
       strcpy(obj1[3].porduction_company,"xyz");
 95
       strcpy(obj1[4].manufacture_date,"23/4/2020");
 96
       strcpy(obj1[4].expiry_date,"25/6/2021");
 97
       obj1[4].package no = 50;
 98
       strcpy(obj1[4].package_status,"open");
 99
100
       101
     // nearing expiry date and vaccines not opened
     printf("Vaccines nearing expiry date and not opened\n");
102
103
       for(int i=0;i<4;i++) {
         if(strcmp(obj1[i].package_status , "not open") == 0) {
104
105
            printf("%s",obj1[i].vaccine name);
```

```
106
               printf(" %s",obj1[i].package_status);
               printf("\n");
107
            }
108
109
110
111
          // nearing expiry date and vaccines opened
      printf("\nVaccines nearing expiry date and opened\n");
112
113
          for(int i=0;i<4;i++) {
           if(strcmp(obj1[i].package_status, "open") == 0) {
114
              printf("%s",obj1[i].vaccine_name);
115
              printf(" %s",obj1[i].package_status);
116
117
              printf("\n");
118
119
          }
120
121
122
          id_vaccine(obj1);
123
124
          return 0;
125 }
```

Output

```
### C:\Users\Prashanth\Desktop\question_1.exe

Prashanth.S 19MID0020

Vaccines nearing expiry date and not opened covishield not open

Vaccines nearing expiry date and opened covaxin open per period of the vaccine administered first with open and then not open prizer open id's of the vaccine administered first with open and then not open Package --> open 2 Covishield 3 retro

Package --> not open

1 Covaxin

Process returned 0 (0x0) execution time: 0.293 s

Press any key to continue.
```

Question-2

Code

```
1
     #include<graphics.h>
 2
     #include<conio.h>
 3
     int main()
 int gd=DETECT, gm;
 5
       initgraph(&gd,&gm,"c://turboc3/bgi");
 6
       outtextxy(20, 20 + 20, "Prashanth.S 19MID0020");
 7
             arc(100,100,0,270,50);
 8
 9
             arc(150,150,0,270,50);
10
11
           circle(200,200,50);
           circle(180,200,10);
12
13
           circle(220,200,10);
14
15
       getch();
16
      closegraph();
17
      return 0;
18
19
```

Output

