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1  /*
2  P2:
3  Design, develop, code and run the program in any suitable language to solve the
4  commission problem.
5  Analyze it from the perspective of Boundary value testing, derive different
6  test cases, execute these test cases and discuss the test results.
7  */
8
9  #include <stdio.h>
10 #include <stdlib.h>
11
12 int main()
13 {
14     int locks, stocks, barrels, t_sales, flag=0;
15     float commission;
16
17     printf("Enter the total number of locks\n");
18     scanf("%d",&locks);
19
20     /*
21     Here flag is used to check invalid input.
22     Invalid input means locks, stocks and barrels exceeding daily limit value.
23     Locks value is less than or equal to zero or more than 70.
24     Stocks value is less than or equal to zero or more than 80.
25     Barrels value is less than or equal to zero or more than 90.
26     */
27     if(locks==--1)
28     {
29         printf("program ends\n");
30         exit(0);
31     }
32     if((locks<=0)|| (locks>70))
33     {
34         printf("Values of locks not in range of 1...70\n");
35         exit(0);
36     }
37
38     printf("Enter the total number of stocks\n");
39     scanf("%d",&stocks);
40
41     if((stocks<=0)|| (stocks>80))
42     {
43         printf("Values of stocks not in range of 1...80\n");
44         exit(0);
45     }
46
47     printf("Enter the total number of barrels\n");
48     scanf("%d",&barrels);
49
50     if((barrels<=0)|| (barrels>90))
51     {
52         printf("Values of barrels not in range of 1...90\n");
53         exit(0);
54     }
55
56     t_sales=(locks*45)+(stocks*30)+(barrels*25); //Total Sales value
57
58     //Three conditions of calculating commission.
59     if(t_sales<=1000)
60     {
61         commission=0.10*t_sales;
62     }
63
64     else if(t_sales<1800)
65     {
66         commission=0.10*1000;

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```
67         commission=commission+(0.15*(t_sales-1000));
68     }
69
70     else
71     {
72         commission=0.10*1000;
73         commission=commission+(0.15*800);
74         commission=commission+(0.20*(t_sales-1800));
75     }
76
77     printf("The total sales is %d\n",t_sales); //
78     printf("The commission is %f",commission);
79     return 0;
80 }
```