The homework for this time is a big challenge to me because I am not skilled at using for loop, while loop, function call and array, and how to apply these loops into my program. I think I have already realized the general ideas of these tools and know how do they work, but I just don't know how to start to write my program when I see the problem which I haven't seen it yet. And this time we need to write the menu to let user choose options and go back menu. I think the most important thing in this time is the control of while loop. Because we need to run the program again and again, where we put the while loop is needed to pay attention. At the first time when I wrote this homework, I always confused by the large codes so that I couldn't easily find the correct place to put while. Besides, I also had no idea about the conditional operator at the first time, so I went to discuss with classmates and asked for their teaching. Finally, I was suggested that use do-while loop and bool function to write this program. The following is some part of code:

```
cout<<setw(6)<<"Enter your product</pre>
number: "<<endl;
                     cout << setw(6) << "All the product numbers' range
are 1001~2999"<<end1;
                     cin>>productn;
                     test=productnum(selection2);
                 }while(!test);
                 if(selection2=='r'||selection2=='R')
                     cout << setw(6) << "Our smartwatch have feature that
can measure you heartrate" << endl;
                 if(selection2=='f'||selection2=='F')
                     cout << setw(6) << "Our sphygmometer have feature
that can measure you blood preasure"<<endl;
                 if(selection2=='v'||selection2=='V')
                     cout << setw(6) << "Our BodyFatMonitor have feature"
that can measure you bodyfats"<<endl;
```

After using if loop to judge the product that the user choose, then using the do-while loop to make it once at least and if the condition is correspond to the conditional operator, it can do it again, so the while condition operator uses char to judge. Also, I set bool function that use to judge the product number range. At first I just didn't know how to use function call correctly, so I asked for help to the classmates. I was told that use bool function was the easiest. In bool function, you can judge the variable and only return 1 or 0, so it only two condition, and it is convenient for me to think the judge logic. After this homework, I realized one important thing: I need to enhance my attention and skill in function call and while, for loop!

}while(selection2!='p');