In class Practice 9/13/2019

Group three or four people team.

For Part I questions, do solo first then discuss as a group.

For Part II and part III work as a team

Part I

sequence, selection,iteration

1. All programs can be written in terms of three types of control statements: ____, ____ and ____.
2. When it isn't known in advance how many times a set of statements will be repeated, a(n) _____ value can be used to terminate the iteration. sentinel;signal;flag;dummy
3. In one statement, assign the sum of the current value of x and y to z and postincrement the value of x and postincrement the value of y. z= x++ + y++;
4. Calculate the remainder after q is divided by divisor and assign the result to q. Write this statement two different ways. q = q%divisor; q%= divisor;
5. Declare variable x to be of type double and initialize it to 1.23. double x = 1.23;
6. The do…while statement tests the loop-continuation condition __after___ executing the loop's body; therefore, the body always executes at least once.
7. The __switch_____ statement selects among multiple actions based on the possible values of an integer variable or expression.
8. The continue statement, when executed in an iteration statement, skips the remaining statements in the loop body and proceeds with the next iteration of the loop.
9. The break statement is required in the default case of a switch selection statement to exit the switch properly. False

Part II

Write a C++ statement or a set of C++ statements to accomplish each of the following:

1) Sum the odd integers between 1 and 99 using a ***for*** statement. Use the unsigned int variables sum and count.

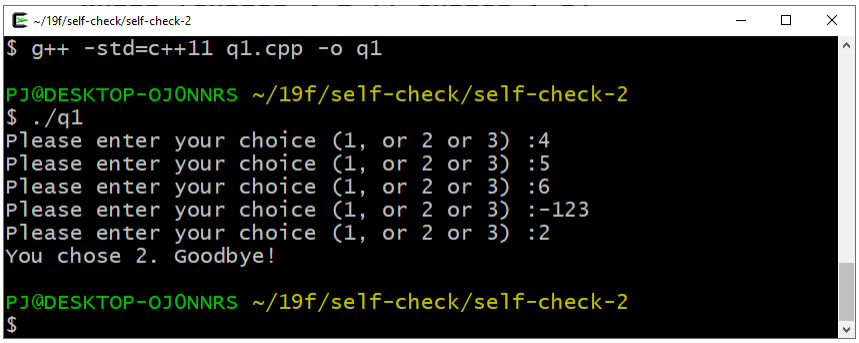
2) Write a C++ program segment which can print the integers from 1 to 20 using a while loop and the unsigned int counter variable x. Print only 5 integers per line. [Hint: When x % 5 is 0, print a newline character; otherwise, print a tab character.]

```
int main () {
    unsigned int sum{0};
    for (unsigned int i{1};i<=99;i += 2){
        sum += i;
    }
    cout << sum;
        return 0; }
```

```
int main () {
    unsigned int i{0};
    while (i<=20) {
        if (i % 5 ==0){
            cout << i << "\n";
        }else{
            cout << i << "\t";
        }
        i++;
    }    return 0; }
```

Part III

1. Write a C++ program which will output a menu of 3 options and ask the user to enter a selection. If the selection is valid which is between 1 and 3, then the program will output the number selected by the user and then exit. Your program will continue to ask the user to enter a choice if number entered by user is not 1, or 2, or 3.



2. Write a C++ program which will find the smallest number among several input integers. Your program will ask the user to enter first integer *n* which represent how many numbers to be processed and then followed by *n* integers.