NAME: LINTA AFFAF DEPT: SOFTWARE ENGINEERING(SELF) PF LAB WORK

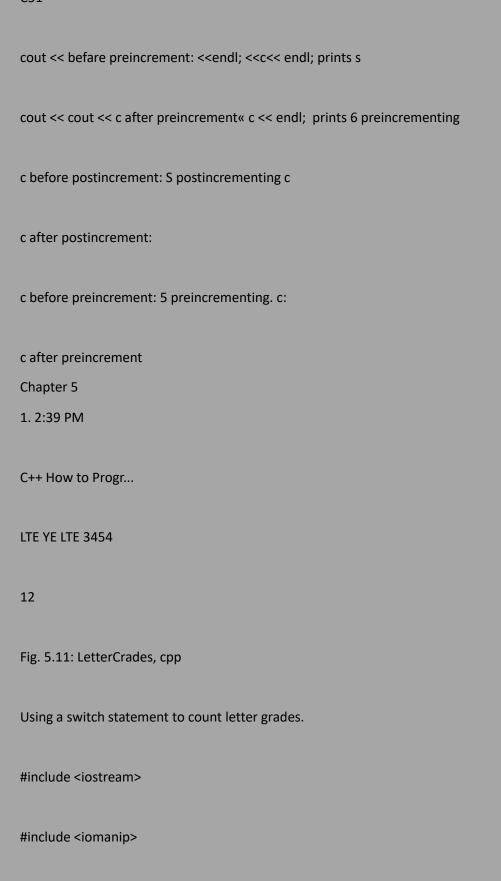
1.

ClassAverage.cpp
Solving the class-average problem using sentinel-controlled iteration.
#include <iostream></iostream>
#include <iomanip» manipulators<="" td=""></iomanip»>
using namespace std;
int main()
int total();
cout << Inter grade or-1
int grade: cin >>grade;
while (grade 11 (total total grade:
gradeCounter gradeCounter 1;
cout ex Enter grade or -1 tatt

```
cin >> grade;
if (gradeCounter) (
// use number with decimal point to calculate average of grades
double average[static cast<double>(total) / gradeCounter):
cout <<Total of the << gradeCounter</pre>
grades entered is << total:
cout << setprecision() << fixed:</pre>
cout << Class average is <<< average << endl;</pre>
else
cout << grades sere entered" << end1:</pre>
Enter grade or or -1 to quit: 97 to quit: 97
Enter grade or -1 to quit: 88
Enter grade or 1 to quit: 72
```

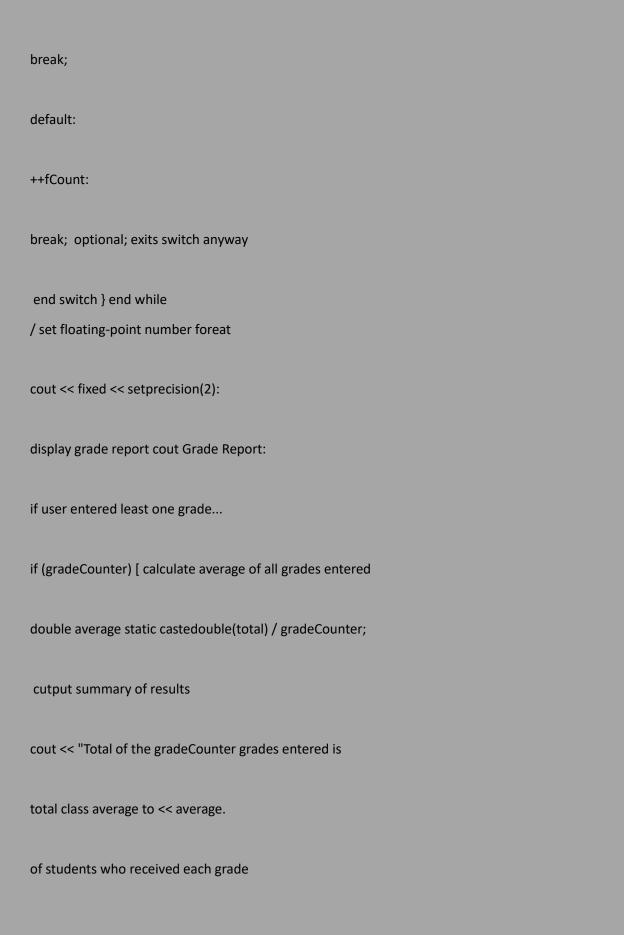
```
Enter grade or 1 to quit: -1
Total of the 3 grades entered is 257.
Class average is 85.67
2. while (grade f
total total grade; // add grade to total gradeCounter gradeCounter 1: // increment counter
// prompt for Input and read next grade from user cout << "Enter grade or 1 to cin >> grade
3. : Analysis.cpp:
// Analysis of examination results using nested control statements.
#include <iostream
using namespace std;
int main C
// initializing variables in declarations unsigned int passes(0);
unsigned int failures(0); unsigned int studentCounter();
// process 10 students using counter-controlled Toop while (studentCounter<10) // prompt user for ing
Input and obtain value from user
cout << "Enter result (1 pass 2): ": result:</pre>
```

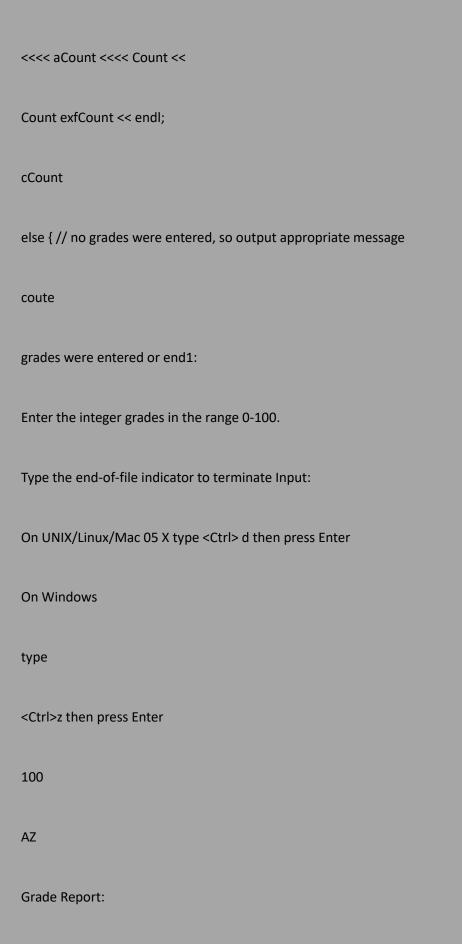
```
int cin result:
// if...else is nested in the while statement if (result) ( passes passes
) else (failures failures:
studentCounter studentCounter + 1;
<< se passes << Failed: << failures <<< endl;
(passes cout << Bonus to instructar" << endl;
4. : Increment.cpp:
#include <iostream>
using namespace std;
int main() {
unsigned int c();
cout << pestincrementing C++ << endl; << after pessincrement: <<< endl;</pre>
cout << before postiocresent: <c<< endl;</pre>
cout << endl;</pre>
```



```
using namespace std:
int main() {
int total(0); sum of grades
unsigned int gradeCounter[0]; number of grades entered
ansigned int acount(); count of A grades unsigned int bCount(): count of grades
unsigned int ccount(0); count of C grades
unsigned int dCount(); count of D grades unsigned int fCount(); count of F grades
cout << "Enter the integer grades in the range 0-100.
"Type the end-of-file indicator te terminate Input:\w
UNIX/Linux/Mec 05 x type Ctrl & then press De Wind type Ctrl z then press Enter": Enter
int grade:
while (cin>> grade) {
total grade; // add grade to total ++gradeCounter; increment number of grades
Increment appropriate letter-grade counter
```

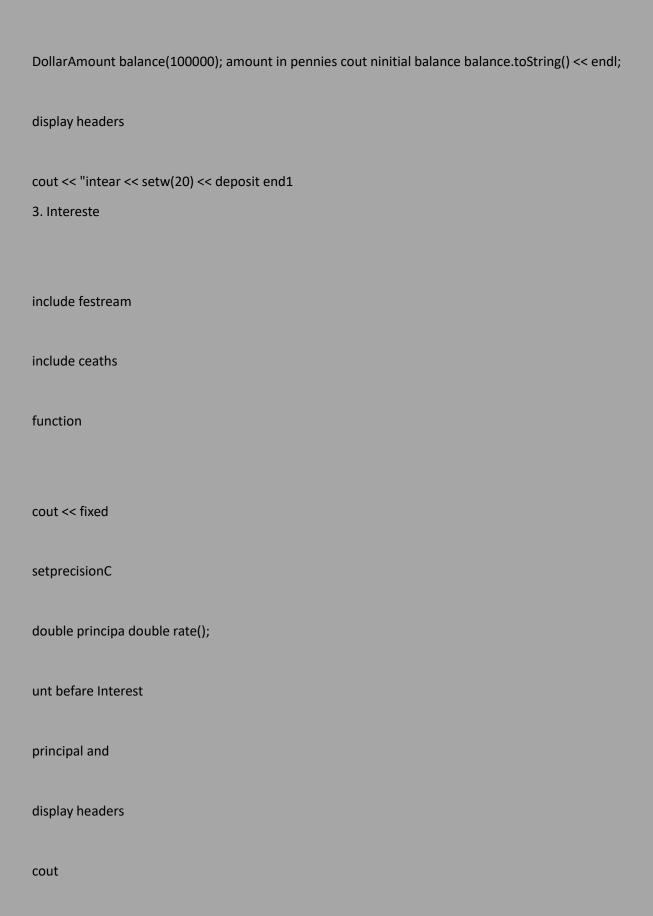
switch (grade/10) (
case 1 Inclusive
aCount:
break;
case it
++bCount: break;
case 7
++cCount:
break;
Fig. 5.11 Uang a switch statement to count letter grades. (Part 1 of 1)
222 Chapter 5 Control Statements: Part 2: Logical Operators
74 3
case 6:
++dCount:



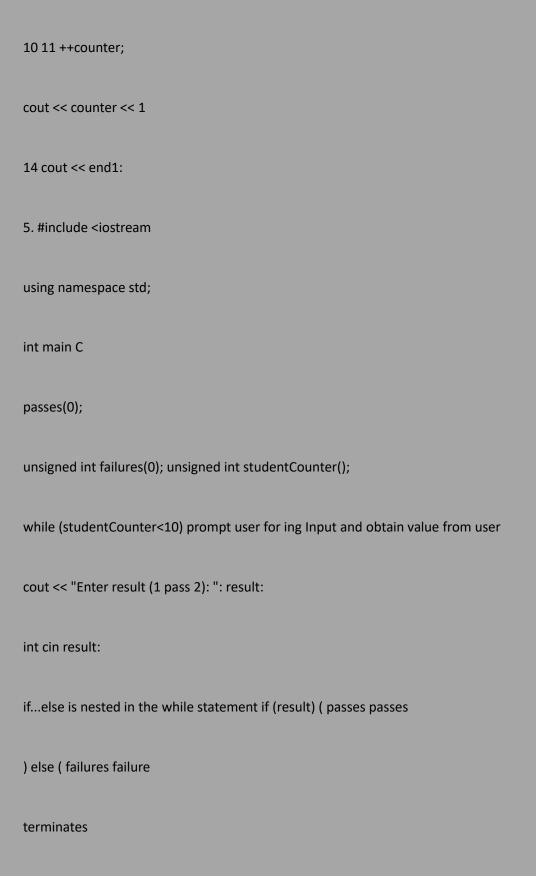


```
Total of the 10 grades entered is 778
```

```
Clask average t
2. int main() { DollarAmount dl(12345); $123.45 DollarAmount d2(1576); $15.76
cout << "After noding 62 (<< d2.toString() <<nto di C << dl.toString() <<
dl.add(d2);// modifies object cout << dl.toString() <<< d1
cout << "After subtracting d<< d2.toString() << "d1.toString() << " d1, subtract (d2); modifles object di
cout << d1.toString() <<</pre>
cout << "After subtracting diee dl.toString() << fros de</pre>
d2.toString() e d2.subtract(d1); modifies object az
cout << d2.toString() <<</pre>
cout << "Enter Integer Interest rate and divisor, for example:"</pre>
for 25: 100 <<"for 2.3.enter 232000
for 2.17%, enter: 237 10000 for 2.375%, enter: 2375 100000
int rate:
cin >> rate >> divisor:
```



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C and1
/calcalate
int year(): year year)
year sete) arount endl;
3. / Summing integers with the for statement.
Finclude <iostream>
using namespace std;
int main() {
unsigned int total(0);
10 (unsigned int number(); number<20; number
11 total number:
4. using namespace std;
unsigned int counter(1);
int main() {
while (counter < 10)
```



```
studentCounter studentCounter + 1;
cout << se passes <<Failed: << failures <<< endl;
if (passes cout << Bonus to instructar" << endl;</pre>
```