Lab Assignment: 9

1. **[5]** Write the program to find the larger of two integers.
2. **[10]** Write the program to find the smallest of three integers.
3. **[10]** Write a program to prompt the user to enter the number to find in the array. And display whether the number is present in the array or not. Declare the following array in the code.

   `2, 5, 6, 9, 12, 7, 16`
4. **[10]** Write a program that does the following: (1) fill an array with 50 random integers; (2) loop through the array, displaying each value, and count the number of negative values; (3) after the loop finishes, display the count. Note: The Random32 procedure from the Irvine32 library generates random integers.
5. **[5]** Convert the following code into Assembly code.

```
int age;

cout << "Please input your age: ";
cin >> age;

if (age < 100) {
    cout << "You are pretty young!\n";
} else if (age == 100) {
    cout << "You are old\n";
} else {
    cout << "You are really old\n";
}
```

6. **[5]** Convert the following code into Assembly code.

```
int num = 90;

if (num < 100) {
    cout << "number is less than 100" << endl;
    if (num > 50) {
        cout << "number is greater than 50";
    }
}
```

7. **[5]** Convert the following code into Assembly code.

```
if( num1 > num2 ) OR ( num1 > num3){
    cout << "num1 is greater than num2 or num3" << endl;
}else{
    cout << "num1 is not greater than num2 or num3" << endl;
}
```

8. **[5]** Convert the following code into Assembly code.

```
int num;
cout << "Enter an integer number between 1 & 99999: ";
cin >> num;
if (num <100 && num >= 1) {
    cout << "Its a two digit number";
}
else if (num <1000 && num >= 100) {
    cout << "Its a three digit number";
}
else if (num <10000 && num >= 1000) {
    cout << "Its a four digit number";
}
else if (num <100000 && num >= 10000) {
    cout << "Its a five digit number";
}
else {
    cout << "number is not between 1 & 99999";
}
```

9. **[10]** Using the following table as a guide, write a program that asks the user to enter an integer test score between 0 and 100. The program should display the appropriate letter grade:

Score Range	**Letter Grade**
90 to 100	A
80 to 89	B
70 to 79	C
60 to 69	D
00 to 59	F