Chapter 5- lab assignment…Ravi Patel… (15 points)

Part 1:

1. Write three void functions: Input two characters, swap two characters, display the two characters.

```cpp
//CPSC 230 RAVI PATEL CHAR INPUT SWAP DISPLAY
#include <iostream>

using namespace std;
char char1;
char char2;

void swap(char* ch1,char* ch2 );
void input();
void display();

int main(int argc, char *argv[]) {
    input();
    swap(char1,char2);
    display();

    return 0;
}

void input(){

    cout << "Input Char 1: ";
    cin >> char1;
    cout << "Input Char 2: ";
    cin >> char2;
}
void swap(char* ch1,char* ch2 ){
    char temp = *ch1;
    *ch1 = *ch2;
    *ch2 = temp;
}
void display(){
    cout << "\nChar 1 swapped is: "<<char1<<endl;
    cout << "Char 2 swapped is: "<<char2;
}

//SAMPLE OUTPUT:
//Input Char 1: a
//Input Char 2: h
//
//Char 1 swapped is: h
//Char 2 swapped is: a
```

2. Write void function that sort three numbers

void sort3 (int &a,   int &b, int &c)

```
//CPSC 230 RAVI PATEL VOID SORT3
#include <iostream>

using namespace std;
int a, b, c;
int d, e, f;
void sort3d(int& d, int& e, int& f);
void sort3a(int& a, int& b, int& c);
void display();
void input();

int main(int argc, char *argv[]) {
    input();
    sort3d(d,e,f);
    sort3a(a,b,c);
    display();
}

void input(){

    cout << "Input 3 numbers ABC: "<<endl;
    cin >> a>>b>>c;
    cout << "Input 3 numbers DEF: "<<endl;
    cin >> d>>e>>f;
}

void sort3d(int& d, int& e, int& f){ //descending order
    if (d < e) //1st, 2nd
        swap(d, e); //swap 1st and 2nd
    if (e < f) //2nd, 3rd
        swap(e, f); //swap 2nd and 3rd
    if (d < f) //2nd, 3rd
        swap(d, f); //swap 2nd and 3rd
    return;
}

void sort3a(int& a, int& b, int& c) //ascending order
{
    if (a > b) //1st, 2nd
        swap(a, b); //swap 1st and 2nd
    if (b > c) //2nd, 3rd
        swap(b, c); //swap 2nd and 3rd
    if (a > b) //1st, 2nd
        swap(a, b); //swap 1st and 2nd
    return;
}

void display(){
    cout<<"A, B, C in ascending order: "<<"\t"<< a<<"\t"<< b<<"\t"<< c<< endl;
    cout<<"D, E, F in descending order: "<<"\t"<< d<<"\t"<< e<<"\t"<< f;
}
```

//SAMPLE OUTPUT:

```
//Input 3 numbers ABC:
//42
//420
//4
//Input 3 numbers DEF:
//6
//690
//69
//A, B, C in ascending order:      4    42    420
//D, E, F in descending order:    690  69    6
```