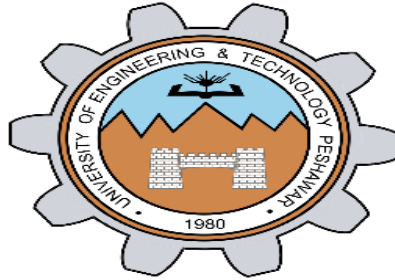# LAB REPORT NO 8

Spring 2020

CSE102L Computer Programming Lab

Submitted by: **Muhammad Ali**

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Class Section: A

"On my honor, as student of University of Engineering and Technology, I have neither given nor received unauthorized assistance on this academic work."

Submitted to:

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(July 24, 2020)

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1. Write a C++ program where you take two values in two variables from user, add the values of the two variables and put it into a third variable using a pointer. you must you only one pointer.

```cpp
#include<iostream>

using namespace std;

void add(int a, int b, int *c);


int main(){


int a,b,c;


cout<<"Enter a number :"<<endl;

cin>>a;

cout<<"Enter another number :"<<endl;

cin>>b;


add ( a,b,&c);

return 0;

}


void add(int a,int b,int *c){
```
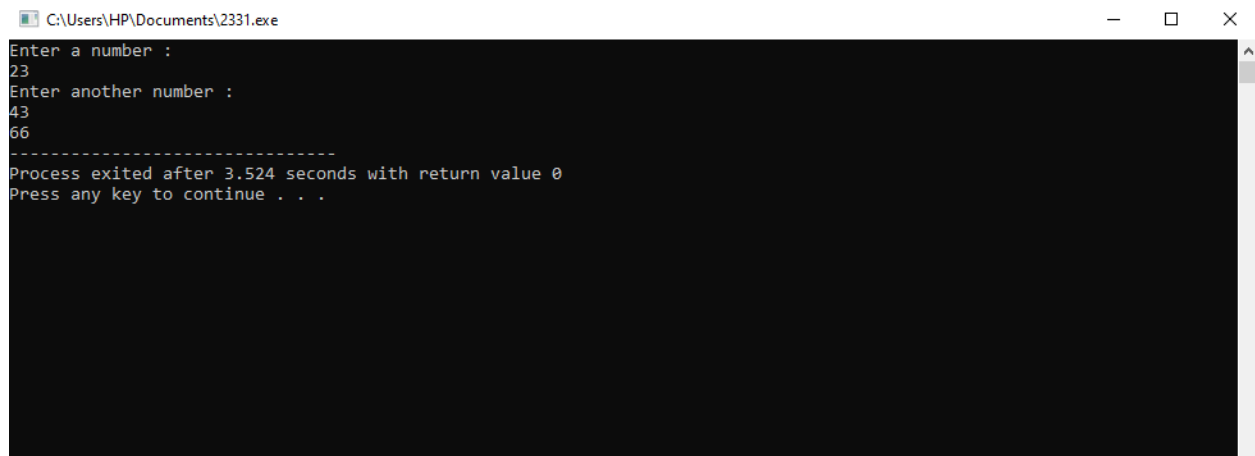
```cpp
*c=a+b;

cout<<*c;



}
```

```
C:\Users\HP\Documents\2331.exe                                    —    □    ×
Enter a number :
23
Enter another number :
43
66
------------------------------
Process exited after 3.524 seconds with return value 0
Press any key to continue . . .
```

2. Write a C++ program where you take two values from user in two variables, swaps the values of the variables using references (&).

```cpp
#include<iostream>

using namespace std;

void myswap(int *x,int *y);



int main(){



int x,y;
```

```cpp
        cout<<"Enter the value of x and y :"<<endl;
        cin>>x>>y;


cout<<"Before swaping x = "<<x<<endl;
        cout<<"Before swaping y = "<<y<<endl;


        myswap( &x ,&y);
        return 0;



}


void myswap(int *x, int *y){

 int temp=*x;
        *x=*y;
        *y=temp;
        cout<<"\nAfter swaping x = "<<*x<<endl;
        cout<<"After swaping y = "<<*y<<endl;



}
```

```
Enter the value of x and y :
23
45
Before swaping x = 23
Before swaping y = 45

After swaping x = 45
After swaping y = 23

-------------------------------
Process exited after 4.955 seconds with return value 0
Press any key to continue . . .
```

3. Write a C++ program where you take a value in a variable from use increment that value by 5 using a pointer in a for loop and display its play using pointer.

#include<iostream>

using namespace std;

main() {

      int n, *a = &n;

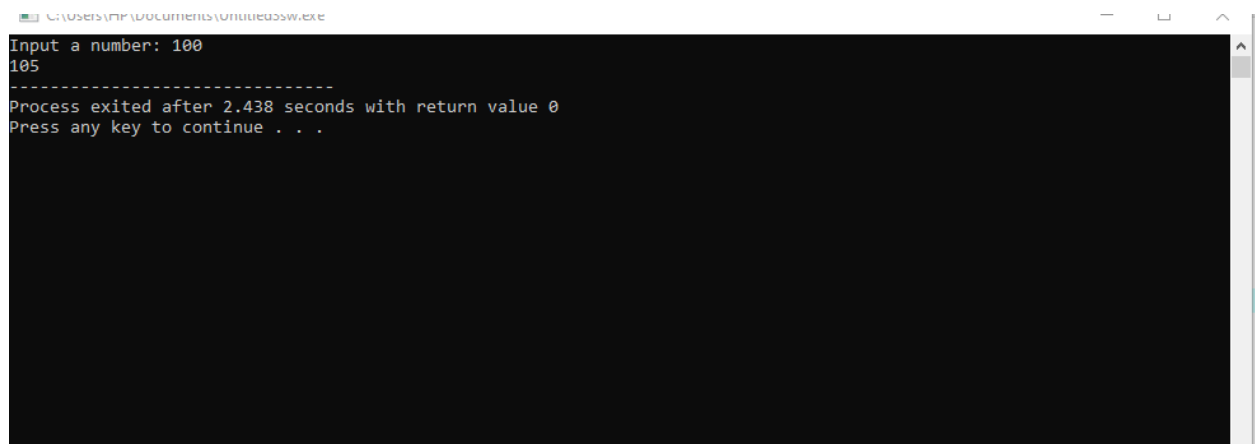   cout<<"Input a number: ";

```cpp
        cin>>n;

        for(int i = 1; i <= 5; i++) {

                (*a)++;

        }

        cout<<*a;

}
```

```
C:\Users\HP\Documents\Untitledssw.exe

Input a number: 100
105
---------------------------------
Process exited after 2.438 seconds with return value 0
Press any key to continue . . .
```
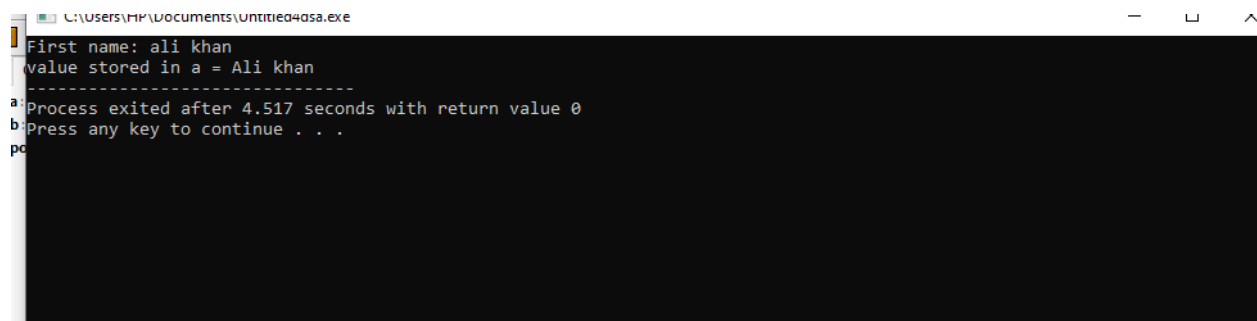
4. Write a C++ program where you take your first name from user in a string variable using pointer edit that string to your last name and then display that string variable (your last name must be hard coded in a separate string variable).

#include<iostream>

#include<string.h>

using namespace std;

```
main() {

        string a, *pointer = &a, b = "Ali khan";

        cout<<"First name: ";

        cin>>a;

        *pointer = b;

        cout<<"value stored in a = "<<a;

}
```

```
C:\Users\HP\Documents\Untitled4asa.exe

First name: ali khan
value stored in a = Ali khan
------------------------------
Process exited after 4.517 seconds with return value 0
Press any key to continue . . .
```

5. Display 1 to n numbers using pointer, user must enter the n.

```cpp
#include<iostream>

using namespace std;

main() {

        int a, n = 1, *b = &n;

        cout<<"Input: ";

        cin>>a;

        while(*b <= a) {

                cout<<*b<<" ";

                (*b)++;

        }

}
```

```
Input: 25
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
-------------------------------
Process exited after 3.295 seconds with return value 0
Press any key to continue . . .
```

6. Add even numbers from 1 to n using pointers user must enter n.

Code:

```cpp
#include<iostream>

using namespace std;

main() {

        int a, b = 2, *c = &b, s = 0, *p = &s;

        cout<<"Enter a number: ";

        cin>>a;

        while(*c <= a) {

                *p += *c;
```

```
        *c += 2;

}

cout<<*p;

}
```