**Buffer Overflow :**

#include<iostream>

#include <string.h>

using namespace std;

int main()

{

bool auth=false;

char username[10];

char password[10];

cout<<"Before accepting Values"<<endl;

cout<<"username addr"<<&username<<endl;

cout<<"username value"<<username<<endl;

cout<<"password addr"<<&password<<endl;

cout<<"password value"<<password<<endl;

cout<<"auth addr"<<&auth<<endl;

cout<<"auth value"<<auth<<endl;

cout<<"enter username :";

cin>>username;

cout<<"\n after accepting username"<<endl;

cout<<"username value"<<username<<endl;

cout<<"password value"<<password<<endl;

cout<<"auth value"<<auth<<endl;

cout<<"enter password :";

cin>>password;

cout<<"\n after accepting username and password"<<endl;

cout<<"username value"<<username<<endl;

cout<<"password value"<<password<<endl;

cout<<"auth value"<<auth<<endl;

if(strcmp(username,"root")==0 && strcmp(password,"pass")==0){

auth=true;

}

if(auth){

cout<<"Access Granted"<<endl;

}

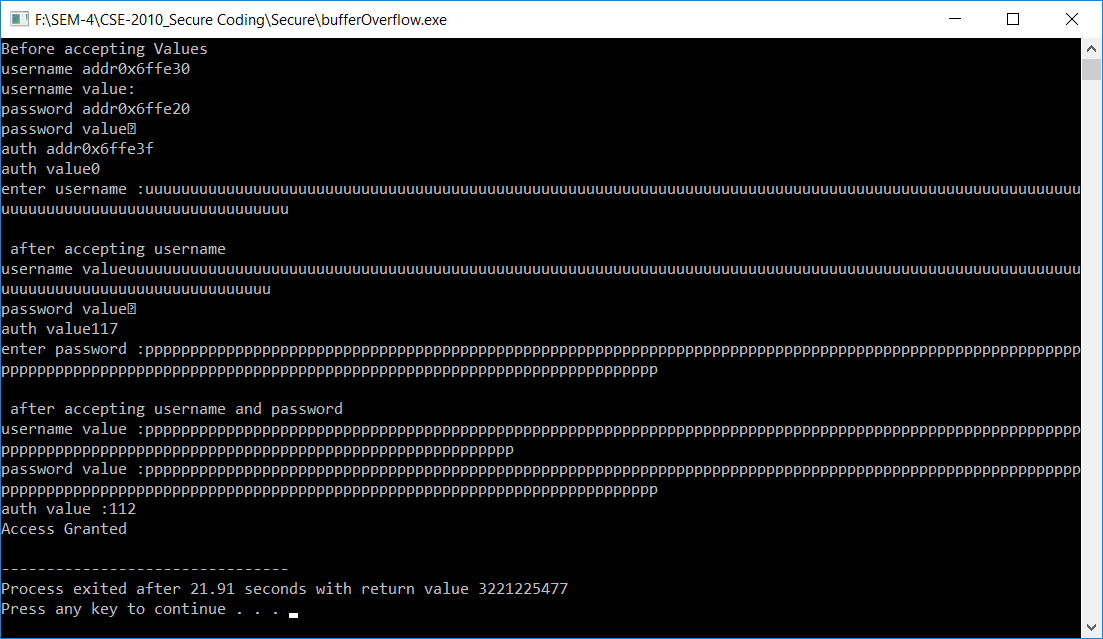
else{

cout<<"Access Denied"<<endl;

}

return 0;

}



**Integer Overflow :**

#include<iostream>

using namespace std;

int main()

{

char n1=100 , n2=200 , sum;

sum=n1+n2;

unsigned char un1=100,un2=200 , usum;

usum=un1+un2;

signed char sn1=100,sn2=200, ssum;

ssum=sn1+sn2;

cout<<endl;

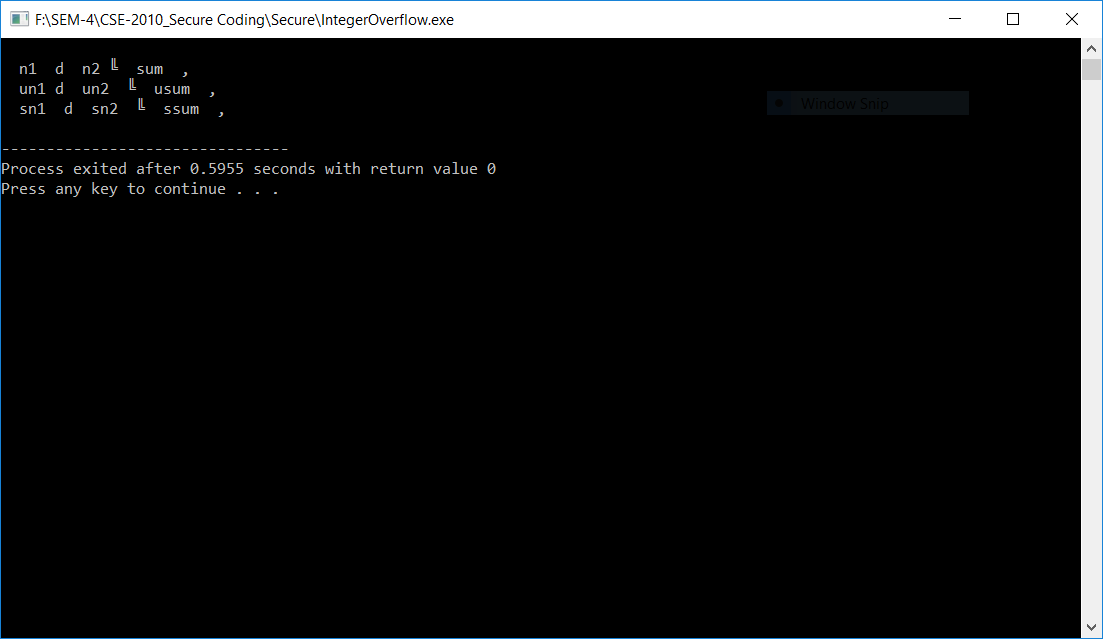
cout<<" n1 "<<n1<<" n2 "<<n2<<" sum "<<sum<<endl;

cout<<" un1 "<<n1<<" un2 "<<un2<<" usum "<<usum<<endl;

cout<<" sn1 "<<sn1<<" sn2 "<<sn2<<" ssum "<<ssum<<endl;

return 0;

}



**Format String:**

#include<iostream>

#include <string.h>

using namespace std;

int main(int argc, char\*\* argv)

{

char buffer[100];

strncpy(buffer, argv[1], 100);

cout<<buffer;

return 0;

}