

## **ASSIGNMENT-2**

**AIM:-Write a program to check the entered address is IPV4 or not.**

```
#include<iostream>
#include<stdio.h>
#include<conio.h>
#include<string.h>
#include<ctype.h>
#include<stdlib.h>
using namespace std;
void limitcheck(int dot,char ip[]);
int main(){
    int count=0,i;
    char str[16];
    cout<<"Enter the IP address:";
    cin>>str;
    for(i=0;i<strlen(str);i++){
        if(str[i]=='.'){
            count++;
        }
    }
    cout<<"No. of Dots in the IP address:"<<count<<endl;
    if(count==3){
        limitcheck(count,str);
    }
    else{
        cout<<"\nInvalid IP:No. of dots not equal to 3.\n";
    }
    return 0;
}
void limitcheck(int dot,char ip[]){
    char s[16];
    int val=0,flag=0;
    int k,asc,j;
    int i=0;
    while(dot>=0){
        for(j=0;(ip[j]!='.')&&(j<strlen(ip));j++){
            s[j]=ip[j];
        }
        s[j]='\0';
        val=atoi(s);
        if(val>=0&&val<=255){
            flag++;
        }
        else{

```

```

        cout<<"Invalid IPV4:Out of 0-255 range\n";
        return;
    }
    for(k=0;k<strlen(s);k++){
        asc=(int)(s[k]);
        if(asc>=48 && asc<=57){}
        else{
            cout<<"Invalid IPV4:Out of digit range\n";
            return;
        }
    }
    i++;
    dot--;
}
if(flag==4){
    cout<<"Valid IPV4 address\n";
    return ;
}
else{
    cout<<"Invalid IPV4 address\n";
    return ;
}
}
}

```

### OUTPUT-

```

Enter the IP address:1.89.245.255
No. of Dots in the IP address:3
Valid IPV4 address

-----
Process exited after 10.37 seconds with return value 0
Press any key to continue . . .
|

```