**CREATION OF VALID OR INVALID IP ADDRESS**

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <ctype.h>

int validate\_number(char \*str) {

while (\*str) {

if(!isdigit(\*str)){ //if the character is not a number, return false

return 0;

}

str++; //point to next character

}

return 1;

}

int validate\_ip(char \*ip) { //check whether the IP is valid or not

int i, num, dots = 0;

char \*ptr;

if (ip == NULL)

return 0;

ptr = strtok(ip, "."); //cut the string using dor delimiter

if (ptr == NULL)

return 0;

while (ptr) {

if (!validate\_number(ptr)) //check whether the sub string is holding only number or not

return 0;

num = atoi(ptr); //convert substring to number

if (num >= 0 && num <= 255) {

ptr = strtok(NULL, "."); //cut the next part of the string

if (ptr != NULL)

dots++; //increase the dot count

} else

return 0;

}

if (dots != 3) //if the number of dots are not 3, return false

return 0;

return 1;

}

int main() {

char ip1[] = "0.0.00.0";

char ip2[] = "172.16.xyz.1";

char ip3[] = "192.64.255.1";

char ip4[] = "125.300.100.4";

validate\_ip(ip1)? printf("Valid\n"): printf("Not valid\n");

validate\_ip(ip2)? printf("Valid\n"): printf("Not valid\n");

validate\_ip(ip3)? printf("Valid\n"): printf("Not valid\n");

validate\_ip(ip4)? printf("Valid\n"): printf("Not valid\n");

}