//  
// Created by BarthSarafin on 20.04.2015.  
//  
  
#include "routingTable.h"  
#include <stdio.h>  
#include <stdlib.h>  
  
routingTable rt[] = {  
 {IPA(160, 85, 18, 0), IPA(255, 255, 255, 240), 1, Direct},  
 {IPA(160, 85, 19, 0), IPA(255, 255, 255, 0), 2, Direct},  
 {IPA(160, 85, 16, 0), IPA(255, 255, 254, 0), 0, Direct},  
 {Default, Default, 0, IPA(160, 85, 16, 1)}  
};  
  
**int** main(**void**) {  
 **int** option = 1;  
 **while**(option) {  
 (**void**) printf("######################################\n");  
 (**void**) printf("# PROG C #\n");  
 (**void**) printf("# bachmste #\n");  
 (**void**) printf("# routing table #\n");  
 (**void**) printf("######################################\n\n");  
  
 **const unsigned** entryCount = **sizeof**(rt) / **sizeof**(routingTable);  
 (**void**) printRoutingTable(entryCount, rt);  
 (**void**) printf("Would you like to continue? [0/1]?\n");  
 (**void**) scanf("%d", &option);  
 fflush(stdin);  
 }  
 **return** EXIT\_SUCCESS;  
}  
  
**int** printRoutingTable(**const unsigned** entryCount, routingTable rt[]) {  
 **int** i;  
 (**void**) printf("Netadress\t Gateway \t\tPort Netmask\n");  
 (**void**) printf("----------------------------------------------------------------------------\n");  
 **for**(i=0; i < entryCount; i++) {  
 (**void**) printf("%u.%u.%u.%u \t-> %u.%u.%u.%u \t\t %u\t %u.%u.%u.%u\n", \_IPA(rt[i].netAddress),  
 \_IPA(rt[i].gateway), rt[i].port, \_IPA(rt[i].netMask));  
 }  
 (**void**) printf("----------------------------------------------------------------------------\n");  
  
 **return** EXIT\_SUCCESS;  
}

//  
// Created by BarthSarafin on 20.04.2015.  
//  
  
#define IPA(p1, p2, p3, p4) (p1 << 24 | (p2 << 16) | (p3 << 8) | (p4))  
#define \_IPA(ip) ((ip >> 24) & 0xFF), ((ip >> 16) & 0xFF), ((ip >> 8) & 0xFF), (ip & 0xFF)  
#define Default 0  
#define Direct 0  
  
**typedef unsigned int** u32;  
**typedef unsigned int** u8;  
**typedef struct** {  
 u32 netAddress;  
 u32 netMask;  
 u8 port :8;  
 u32 gateway;  
} routingTable;  
  
**int** printRoutingTable(**const unsigned** entryCount, routingTable rt[]);