#include<sys/types.h>  
#include<sys/socket.h>  
#include<net/if\_arp.h>  
#include<sys/ioctl.h>  
#include<stdio.h>  
#include<string.h>  
#include<unistd.h>  
#include<math.h>  
#include<complex.h>  
#include<arpa/inet.h>  
#include<netinet/in.h>  
#include<netinet/if\_ether.h>  
#include<net/ethernet.h>  
#include<stdlib.h>  
int main()  
{  
struct sockaddr\_in sin={0};  
struct arpreq myarp={{0}};  
unsigned char \*ptr;  
int sd;  
sin.sin\_family=AF\_INET;  
printf("Enter IP address: ");  
char ip[20];  
scanf("%s", ip); if(inet\_pton(AF\_INET,ip,&sin.sin\_addr)==0) {  
printf("IP address Entered '%s' is not valid \n",ip);  
exit(0);  
}  
memcpy(&myarp.arp\_pa,&sin,sizeof(myarp.arp\_pa));  
        strcpy(myarp.arp\_dev,"echo");  
        sd=socket(AF\_INET,SOCK\_DGRAM,0);  
        printf("\nSend ARP request\n");  
        if(ioctl(sd,SIOCGARP,&myarp)==1)  
{  
printf("No Entry in ARP cache for '%s'\n",ip);  
exit(0);  
        }  
ptr=&myarp.arp\_pa.sa\_data[0];  
printf("Received ARP Reply\n");  
printf("\nMAC Address for '%s' : ",ip);  
        printf("%p:%p:%p:%p:%p:%p\n",ptr,(ptr+1),(ptr+2),(ptr+3),(ptr+4),(ptr+5));  
        return 0;  
}