```c
#include <stdio.h>
#include <string.h> // for strlen
#include <stdlib.h> // for abs

int validchar(char ch)
{
        // we know the ascii table has these continuities
        if (ch >= 'A' && ch<='Z') return(0);
        if (ch >= 'a' && ch<='z') return(0);
        if (ch >= '0' && ch<='9') return(0);
        if (ch=='.' || ch=='-' || ch=='_') return(0);
        return(1);
}

int checkDNSValid(char *str)
{
        if (!str) return(1);
        if (strlen(str)==0) return(2);
        if (strlen(str)>255) return(2);
        // chars valid?
        for (char *ch=str;*ch;ch++) if (validchar(*ch)) return(3);
        if (str[0]=='.' && strlen(str)!=1) return(4);
        if (str[0]=='.') return(5);
        // labels not too long?
        int labellen=0;
        for (char *ch=str;*ch;ch++) {
                labellen++;
                if (*ch=='.') {
                        if (*(ch-1)=='.') return(6); // no two dots in a row
                        // new label
                        if (labellen>63) return(7);
                        labellen=0;
                }
        }
        // last label
        char *ll=&str[strlen(str)-labellen];
        int shorty=0;
        if ((strlen(str)-strlen(ll)) <= 4) shorty=1;
        if (!shorty && ll[0]=='x'&&ll[1]=='n'&&ll[2]=='-'&&ll[3]=='-') return(0);
        for (char *ch=ll;*ch;ch++) {
                if (*ch=='-' || *ch=='_' || (*ch>='0' && *ch<='9')) return(7);
        }
        return(0);
}

int compareDNSNames(char *str1,char *str2)
{
        if (checkDNSValid(str1) || checkDNSValid(str2)) return(8);
        int s1len=strlen(str1);
        int s2len=strlen(str2);
        if (s1len!=s2len) {
                // only good option is one ends in a trailing dot and otherwwise same
                int shortlen=s1len;
                int longlen=s2len;
                if (s2len<s1len) {
                        // swap
                        shortlen=s2len;
                        longlen=s1len;
                }
                if (abs(s1len-s2len)!=1) return(9);
                if (strncasecmp(str1,str2,shortlen)) return(10);
                if (s2len<s1len) {
                        if (str1[s1len-1]!='.') return(11);
                } else {
                        if (str2[s2len-1]!='.') return(12);
                }
        } else {
                if (strncasecmp(str1,str2,s1len)) return(11);
        }
        return(0);
}

int main(int argc,char *argv[])
{
```

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        if (argc==2) {
                int rv=checkDNSValid(argv[1]);
                printf("Checked %s - result: %d\n",argv[1],rv);
        }
        if (argc==3) {
                int rv=compareDNSNames(argv[1],argv[2]);
                printf("Compared %s and %s - result: %d\n",argv[1],argv[2],rv);
        }
        return (0);
}
```