Program that Outputs the same

Program that outputs the same is technically called as *self-reproducing* or *self-replicating program*. You may wonder whether a C program could output the same or not. Yes, it’s possible. As it is a tough job, it is considered to be an intellectual programming.

### 11.1 Self-replicating program #1

The following program is a common self-replicating program. When you run this program, you would get the same as output. So don’t ask me the output!!!

```c
main( ){char *c="main( ){char *
*c=%c%s%c;printf(c,34,c,34);}";printf(c,34,c,34);}
```

### 11.2 Self-replicating program #2

Some people slightly modify the above self-replicating program and obtain the following program.

```c
char*s="char*s=%c%s%c;main(){printf(s,34,s,34);}";main(){printf(s,3
4,s,34);}
```

### 11.3 Self-replicating program #3

The following program is an interesting one, because it is self-replicating as well as palindrome! It was by Dan Hoey.

```c
/**/char q='",*a="*/**/char q='%c',*a=%c%s%c*/);b(stup;]d[ b=]d-472[b]--d(elihw; )q,a,q,2+a,b(ftnrps; )b(stup{} (niam;731=d ni;)572
[b,"b[275];int d=137;main(){puts(b);sprintf(b,a+2,q,q,a,q);while(d--)b[274-d]=b[d];puts(b);}/>c%s%c=a*,'c%'=q rahc/**//**"=a*,'"'=q rahc/**/
```