

## Program Code

```
#include<stdio.h>
#include<string.h>

char code[20][20];

void main()
{
    printf("\nEnter the number of lines : ");
    int n;
    scanf("%d",&n);

    printf("\nEnter the codes : \n");

    for(int i=0;i<n;i++)
        scanf(" %s",code[i]);

    printf("\nAfter constant_propogation is applied :\n");

    for(int i=0;i<n;i++)
    {
        char temp[20];
        char c;
        strcpy(temp,"");
        int flag=1;
        for(int j=2;j<strlen(code[i]);j++)
        {
            c=code[i][0];
            if(code[i][j]>='0' && code[i][j]<='9')
            {
                strcat(temp,&code[i][j],1);
            }
            else
            {
                flag=0;
                break;
            }
            //printf("\t%s",temp);
        }
        if(flag)
        {
            for(int j=i;j<n;j++)
            {
                //printf("%d ",i);
                for(int k=2;k<strlen(code[j]);k++)
                {
                    if(code[j][k]==c)
                    {
                        char t[20];
                        strcpy(t,"");
                        for(int x=k+1;x<strlen(code[j]);x++)
                        {
                            strcat(t,&code[j][x],1);
                        }

                        //printf("\n%s",t);
                        char r[20];
                        strcpy(r,"");
                        for(int x=0;x<k;x++)
```

```

        {
            strcat(r,&code[j][x],1);
        }
        //printf("%s",r);
        strcat(r,temp);
        strcat(r,t);
        strcpy(code[j],r);
        //printf("\n%s",code[j]);
    }
}
}
else
    continue;
}
for(int i=0;i<n;i++)
    printf("\n%s",code[i]);
printf("\n");
}

```

## Output

```

students@pgcse-HP-280-G1-MT:~/Desktop/R7_66/R7_66/3/9$ ./constant_propagation
Enter the number of lines : 5
Enter the codes :
a=5
b=3
c=a+b
d=2*a+b
e=d/a
After constant_propagation is applied :
a=5
b=3
c=5+3
d=2*5+3
e=d/5

```