

CS & IT ENGINEERING

Programming in C

String in C Programming

Strings-1

DPP 01

Discussion Notes



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TOPICS TO BE COVERED

01 Question

02 Discussion

Q.1

Consider the following codes P and Q as:

[NAT]

P : char* p = "GATEWallah";

→ Read only Memory

p[5] = 'A';

printf("%s", p);

Q: char* p = "GATEWallah";

char* q = p;

q[5] = 'A';

printf("%s", q);

The number of INCORRECT codes is/are 2.



Q.2

P : char s1[] = "GATE";

char s2[] = "GATE";

if(s1 == s2) printf("YES");

else

printf("NO");

Q : char s1[] = "GATE";

char s2[] = "GateWallah";

if(*s1 == *s2) printf("YES");

else

printf("NO");

The outputs are-

[MCQ]



A.

P = YES Q = YES

B.

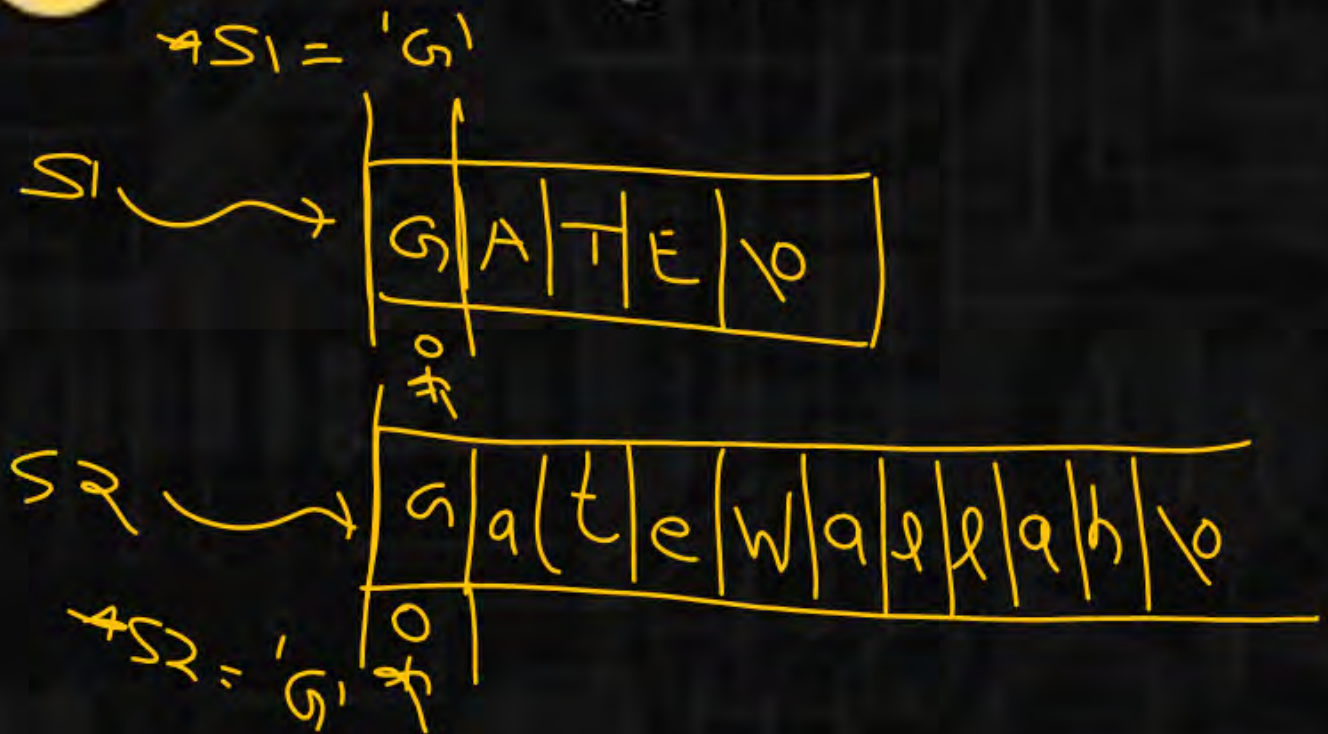
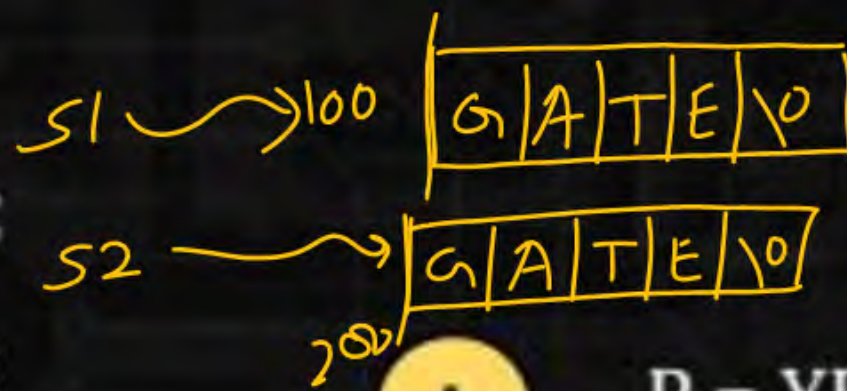
P = YES Q = NO

C.

P = NO Q = YES

D.

P = NO Q = NO



Q.3

[MCQ]



P : char s[20];

printf("Enter your GATE stream with year: \n");

scanf("%s",s);

printf("%s",s);

CS 2023
CS

Q : char s[20];

printf("Enter your GATE stream with year: \n");

gets(s);

printf("%s",s);

CS 2023

D

If the input string is "CS 2023", the outputs are-

A.

P=CS 2023 Q = CS 2023

B.

P=CS 2023 Q = CS

C.

P=CS Q = CS

D.

P = CS Q = CS 2023

Q.4



```
#include<stdio.h>
#include<string.h>
int main()
{
    char s[20]="GATEWallah";
    printf("%s",s+4);
    s[4]=0;
    printf("%s",s);
    return 0;
}
```

[MCQ]

100



100 101 102 103 104 105

s+4
*(s+4)
s[4]

Wallah

GATE

The output is-

☒ A.

WallahGATE

☐ B.

EWallahGAT

☐ C.

WallahGATE0allah

☐ D.

EWallahGAT0allah

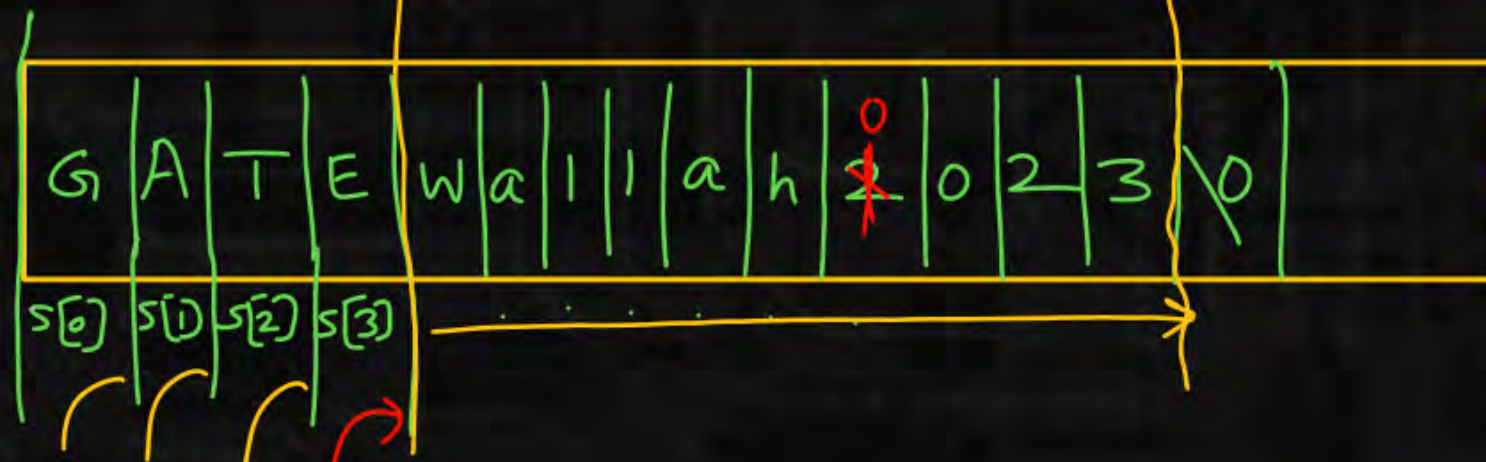
Q.5



```
#include<stdio.h>
#include<string.h>
int main()
```

```
{
    char s[20]="GATEWallah2023";
    s[10]='0';
    printf("%s", s+s[3]-s[1]);
    return 0;
}
```

The output printed is-



[MCQ]

A - 65 x
B - 66 x+1
C - 67 x+2
D - 68 x+3
E - 69 x+4

s+4
s+'E' - 'A'
Add
s+69 - 65
s+4

(C)

A.

Wallah0

B.

Wallah2023

C.

Wallah0023

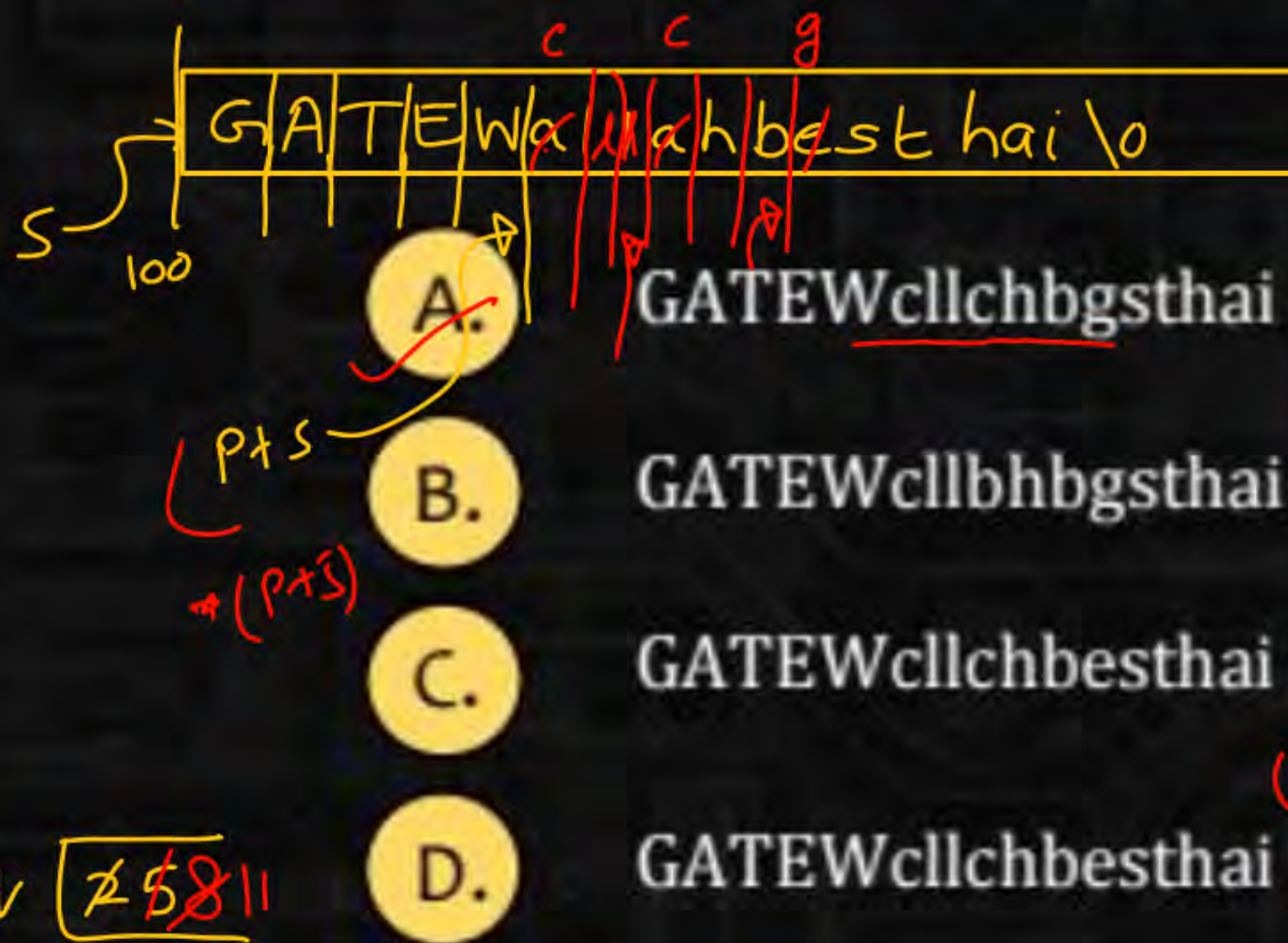
D.

Wallah

Q.6

```
#include<stdio.h>
#include<string.h>
void f(char *p)
{
    static int q=2;
    q=q+3;
    p[q]+=2;
}
int main()
{
    char s[20]="GATEWallahbesthai";
    int i=0;
    for(i=0;i<3;i++){
        f(s);
    }
    printf("%s",s);
    return 0;
}
```

The output string printed is-



[MCQ]



(ii) $i=1$
 $f(100)$ $P=100$

$P[8] = P[8] + 2$

(iii) $i=2$ $f(100)$ $P=100$

'a' $\rightarrow x$
'b' $\rightarrow x+1$
'c' $\rightarrow x+2$

$\Rightarrow (P+5) = x+2$

① $i=0$
 $f(100)$
 $P \Rightarrow 100$

$P[a] = P[a] + 2$

$\Rightarrow (P+5) = P[s] + 2$

$\Rightarrow (P+5) = (P+5) + 2$
 $= 'a' + 2 =$

$P[11] = P[11] + 2$

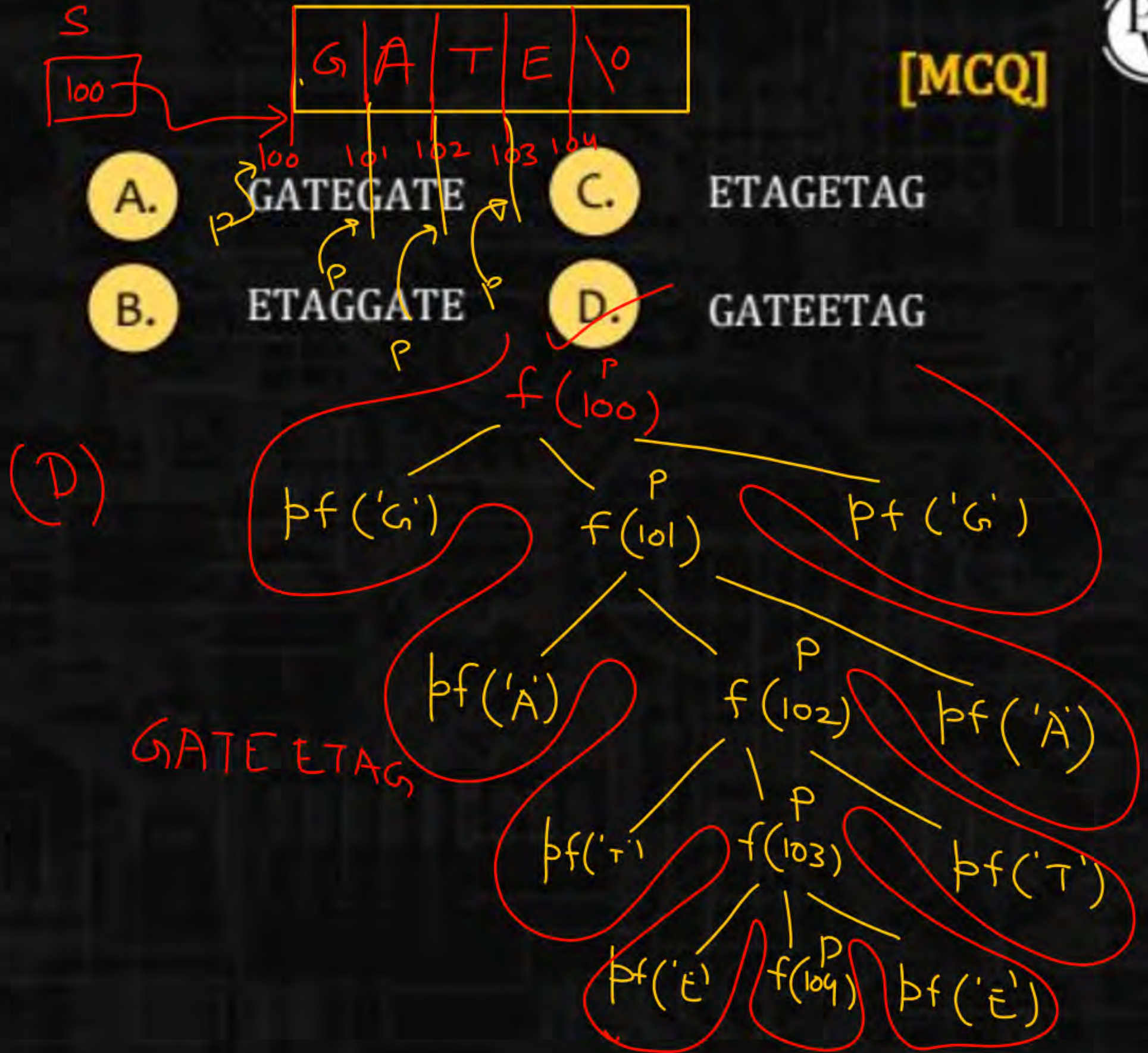
(A)

Q.7

```
#include<stdio.h>
#include<string.h>
void f(char *p){
    if(*p!=0){
        printf("%c", *p);
        f(p+1);
    }
    printf("%c", *p);
}
int main()
{
    char s[5]="GATE";
    f(s);
    return 0;
}
```

The output is-

[MCQ]



Q.8

a $\neq 10$

[NAT]



```
#include<stdio.h>
#include<string.h>
int main()
{
    int a=1;
    char b[ ]="GATE2024";
    char c[ ]="GATE2024";
    int d=strcmp(b,c);
    if(d==0)
    a=printf("GATEWallah");
    printf("%d",a);
    return 0;
}
```

The value of a is 10.

