

Name : _____

CS 100 Quiz #11

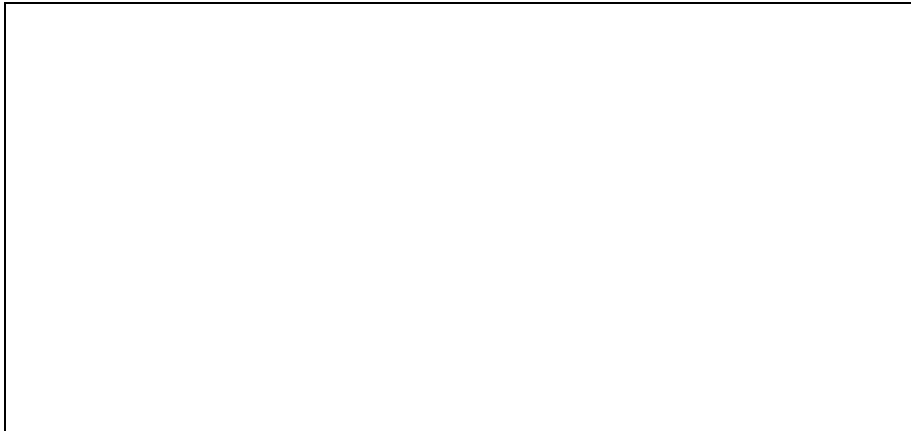
Give the output of the C program shown below:

```
#include <stdio.h>

int max(int a, int b) {
    if ( a > b ) return a;
    return b;
}

int f(int num) {
    if (num == 0) return 0;
    int digit = num % 10;
    return max(digit, f(num/10) );
}

int main( ) {
    printf("25 is %d\n", f(25) );
    printf("10 is %d\n", f(10) );
    printf("8642 is %d\n", f(8642) );
    printf("1591 is %d\n", f(1591) );
    return 0;
}
```



Give the output of the C program shown below:

```
#include <stdio.h>

int f(char *str, char ch) {
    if ( str[0] == '\0' )
        return 0;

    if ( str[0] == ch )
        return 1 + f(str+1, ch);

    return f(str+1, ch);
}

int main( ) {
    printf("a is %d\n", f("alabama", 'a') );
    printf("b is %d\n", f("Tide", 'z') );
    printf("c is %d\n", f("122333", '3') );
    printf("d is %d\n", f("zzzzz", 'z') );
    return 0;
}
```

