```c
#include<stdio.h>

int main(void){
    char A[1000];
    int edo=1,i=0;
    printf("\nIngrese NÃºmero\n");
    scanf("%s",&A[i]);
    while(edo!=12){
        switch (edo){
            case 1:
                if(A[i]=='+' | A[i]=='-'){
                    edo=2;
                    i++;
                }
                else{ if(A[i]=='0'|A[i]=='1'|A[i]=='2'|

A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                    A[i]=='7'|A[i]=='8'|A[i]=='9'){
                    edo=3;
                    i++;
                    }
                    else edo=10;
                }
                break;
            case 2:
                if(A[i]=='0'|A[i]=='1'|A[i]=='2'|

A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                    A[i]=='7'|A[i]=='8'|A[i]=='9'){
                    edo=3;
                    i++;
                }
                else edo=10;
                break;
            case 3:
                if(A[i]=='0'|A[i]=='1'|A[i]=='2'|

A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                    A[i]=='7'|A[i]=='8'|A[i]=='9'){
                    edo=3;
                    i++;
                }
                else{
                    if(A[i]=='.'){
                        edo=4;
                        i++;
                    }
                    else{
                        if(A[i]=='e'){
                            edo=5;
                            i++;
                        }
```

1

```
                                else edo=9;
                        }
                }
                break;
        case 4:
                if(A[i]=='0'|A[i]=='1'|A[i]=='2'|

A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                        A[i]=='7'|A[i]=='8'|A[i]=='9'){
                        edo=4;
                        i++;
                }
                else{
                        if(A[i]=='e'){
                                edo=5;
                                i++;
                        }
                        else{
                                if(A[i]=='.') edo=10;
                                else edo=8;
                        }
                }
                break;
        case 5:
                if(A[i]=='+'|A[i]=='-'){
                        edo=6;
                        i++;
                }
                else{
                        if(A[i]=='0'|A[i]=='1'|A[i]=='2'|

A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                        A[i]=='7'|A[i]=='8'|A[i]=='9'){
                                edo=7;
                                i++;
                        }
                        else edo=10;
                }
                break;
        case 6:
                if(A[i]=='0'|A[i]=='1'|A[i]=='2'|
                A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                A[i]=='7'|A[i]=='8'|A[i]=='9'){
                        edo=7;
                        i++;
                }
                else edo=10;
                break;
        case 7:
                if(A[i]=='.'|A[i]=='e') edo=10;
                else{
                        if(A[i]=='0'|A[i]=='1'|A[i]=='2'|
```

```c
                A[i]=='3'|A[i]=='4'|A[i]=='5'|A[i]=='6'|
                            A[i]=='7'|A[i]=='8'|A[i]=='9'){
                                    edo=7;
                                    i++;
                            }
                            else edo=11;
                    }
                    break;
            case 8:
                    printf("Es un número fraccional\n\n");
                    edo=12;
                    break;
            case 9:
                    printf("Es un número entero\n\n");
                    edo=12;
                    break;
            case 10:
                    printf("No es un número\n\n");
                    edo=12;
                    break;
            case 11:
                    printf("Es un número en notación cientÃ-
fica\n\n");
                    edo=12;
                    break;
        }
    }
}
```