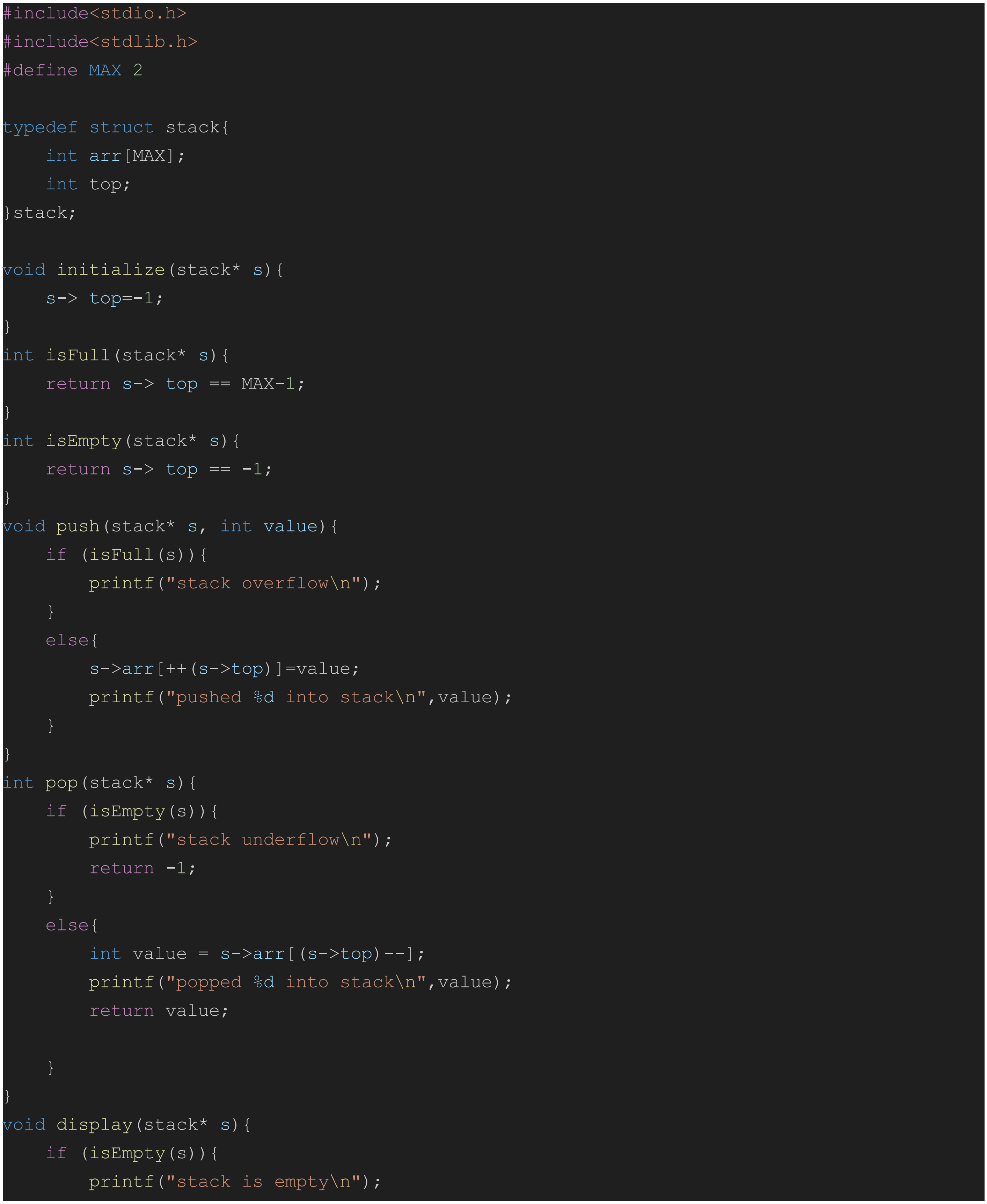
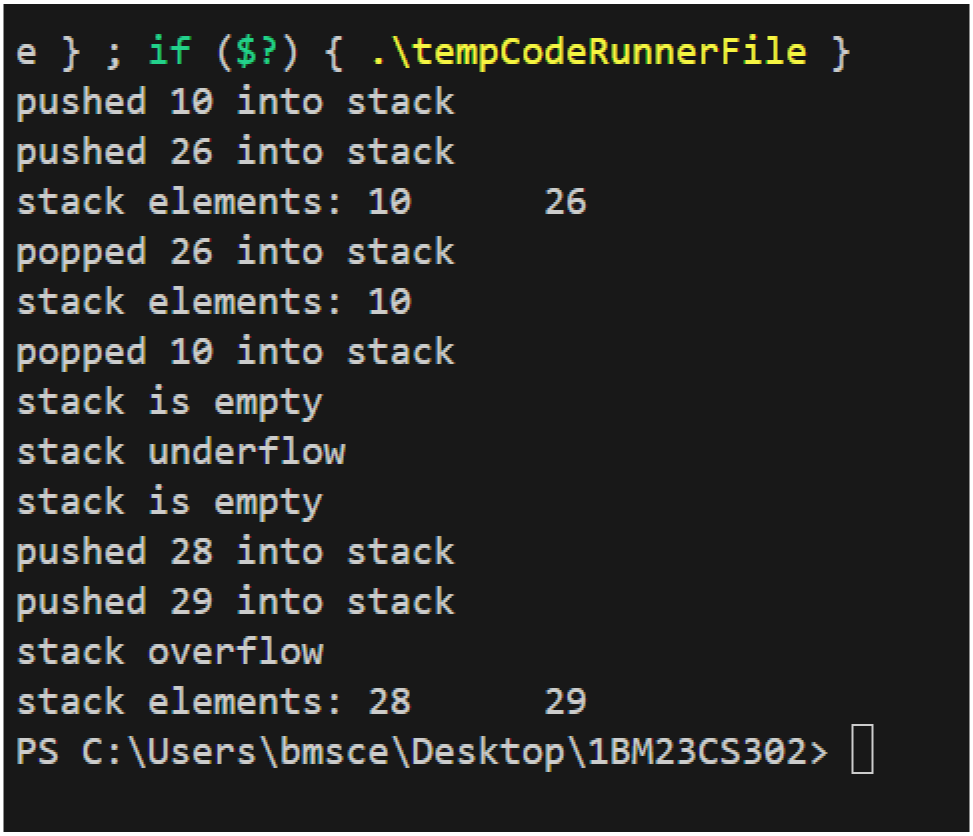


```c
#include<stdio.h>
#include<stdlib.h>
#define MAX 2

typedef struct stack{
    int arr[MAX];
    int top;
}stack;

void initialize(stack* s){
    s-> top=-1;
}
int isFull(stack* s){
    return s-> top == MAX-1;
}
int isEmpty(stack* s){
    return s-> top == -1;
}
void push(stack* s, int value){
    if (isFull(s)){
        printf("stack overflow\n");
    }
    else{
        s->arr[++(s->top)]=value;
        printf("pushed %d into stack\n",value);
    }
}
int pop(stack* s){
    if (isEmpty(s)){
        printf("stack underflow\n");
        return -1;
    }
    else{
        int value = s->arr[(s->top)--];
        printf("popped %d into stack\n",value);
        return value;

    }
}
void display(stack* s){
    if (isEmpty(s)){
        printf("stack is empty\n");
    }
    else{
        printf("stack elements: ");
        for(int i=0; i<=s->top;i++){
            printf("%d\t",s->arr[i]);
        }
        printf("\n");
    }
}
int main(){
    stack s;
    initialize(&s);

    push(&s,10);
    push(&s,26);
    display(&s);

    pop(&s);
    display(&s);
    pop(&s);
    display(&s);
    pop(&s);
    display(&s);

    push(&s,28);
    push(&s,29);
    push(&s,30);
    display(&s);

    return 0;

}
```



```
e } ; if ($?) { .\tempCodeRunnerFile }
pushed 10 into stack
pushed 26 into stack
stack elements: 10      26
popped 26 into stack
stack elements: 10
popped 10 into stack
stack is empty
stack underflow
stack is empty
pushed 28 into stack
pushed 29 into stack
stack overflow
stack elements: 28      29
PS C:\Users\bmsce\Desktop\1BM23CS302>
```