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IBM19CSI78

```c
#include <stdio.h>
# include < stdlib.h>

#define SIZE 5
int top =1;
int stack[SIZE];
void push (int ele)

{
    if (isFull())

    {
        printf("The stack is full \n");
    }
    else

    {
        top++;
        stack [top] = ele;
    }

}

int pop()
{
    if (is Empty())
    {
        return o;
    }
    else
    {
        return stack[top --];
    }

}

int isEmpty()
{
    if (top == -1)
        return 1;
```

```c
    else
        return0;
}
int isFull()
{
    if (top == SIZE-1)
        return 1;
    else
        return0;
}
void display()
{
    if (isEmpty())
        printf("The stack is empty\n");
    else
    {
        printf("The elements are\n");
        for (int i=0; i<=top; i++)
        {
            printf("%d\n", stack[i]);
        }
    }
}
int main()
{
    int c,d,p;
    while (1)
    {
```

```c
printf ("Enter command\n1-Push\n2-Pop\n3-Display 4-Exit\n");
scanf ("%d", &c);
switch (c)

{
case 1: print ("Enter an element \n");
        scanf ("%d", &d);
    push (d);
    break;

Case 2: p = pop ();
    if (p = =0)
    printf ("stack is empty \n");

    else
    printf ("Element removed successfully \n");
        break;

case 3: display ();
    break;

case 4: exit (0);
default : printf ("Invalid input \n");

}

}

return 0;

}
```