

STACK OPERATION EXP 2 .C

```
#include <stdio.h>
#include<stdlib.h>
#define SIZE 100

int stack[SIZE];
int top = -1;

void push();
void pop();
void display();

int main()
{
    int choice ;
    while (1)
    {
        printf("BY JAYETA KENI");
        printf("\n Stack operation :\n");
        printf("1.Push(insert)\n");
        printf("2.Pop(delete)\n");
        printf("3.Display\n");
        printf("4.exit\n");
        printf("enter your choice:");
        scanf("%d",&choice);
        switch(choice)
        {
            case 1 :
                push();
                break;
            case 2:
                pop();
                break;
            case 3 :
                display();
                break;
            case 4:
                printf("exiting program\n");
                exit(0);
            default:
                printf("invalid choice! please try again");
        }
    }
}
```

```

void push() {
    int value;
    if (top==SIZE-1) {
        printf("stack overflow!cannot insert.\n");
    }
    else {
        printf("enter the value to push:");
        scanf("%d",&value);
        stack[++top]=value;
        printf("%d pushed onto the stack.\n",value);
    }
}

void pop()
{
    if (top== -1)
    {
        printf("stack underflow! nothing to delete.\n");
    }
    else
    {
        printf("%d popped from the stack.\n",stack [top--]);
    }

}

void display()
{
    int i;
    if (top== -1) {
        printf("stack is empty!\n");
    }
    else
    {
        printf("stack elements are :\n");
        for (i=top;i>=0;i--) {
            printf("%d\n",stack[i]);
        }
    }
}

```