

#define size 10

struct stack {

int s[size];

int top;

} st;

int stfull()

{
if (st.top >= size - 1)

return 1;

else

return 0;

void push(int element)

{
st.top++;
st.s[st.top] = item;

}

int stempty()

{
if (st.top == -1)

return 1;

else

return 0;

}

int pop()

{

int item;

item = st.s[st.top];

st.top--;

return (item);

}

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```

void display()
{
    int i;
    if (st.empty())
        printf("\n Stack is empty\n");
    else
    {
        for (i = st.top; i >= 0; i--)
            printf("%d", st.s[i]);
    }
}

```

```

void main(void)
{
    int item, choice;
    char ans;
    st.top = -1;
    printf("Implementation of Stack\n");
}

```

```

do {
    printf("Main Menu");
    printf("\n 1. Push \t 2. Pop \t 3. Display\n\t 4. exit");
    printf("enter your choice\n");
}

```

```

switch(choice)
{
    case 1: printf("enter the item to be pushed\n");
            scanf("%d", &item);
            if (st.full())
                printf("Stack is full\n");
            else
                push(item);
            break;
}

```

```
case 2: if (stempty())  
    printf("Empty stack | Underflow\n");  
    else {  
        item = pop();  
        printf("the popped element is %.d", item);  
    }  
    break;
```

```
case 3: display();  
        break;
```

```
case 4: exit(0);  
    }  
    printf("Do you want to continue?");  
    ans = getch();  
    while (ans == 'y' || ans == 'Y');  
    getch();  
}
```