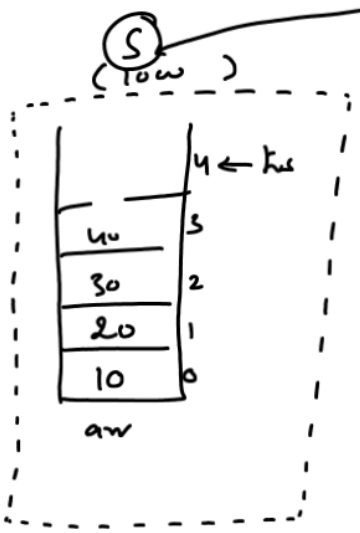
```
struct Stack
{
    int arr[5];
    int tos;
};
void push ( struct Stack *, int );
int pop ( struct Stack * );

int main( )
{
   struct Stack S;
   int i, x;
   S.tos = -1;
   for( i = 1 ; i <= 6 ; i++)
   {
       printf ("Enter ele:");
       scanf ("%d", &x);
       push (&S , x );
   }
   for(i = 1 ; i <= 6 ; i++)
   {
       x = pop( &S);
       printf("\n Popped ele = %d", x );
   }
   return 0;
}
```




```
void push (struct Stack *p, int x)
{
    if (p->tos == 4)
    {
        printf ("\nStack Overflow");
        return;
    }
    p->tos = p->tos + 1;
    p->arr[p->tos] = x;
    printf("\n Pushed %d", x);
}
```

```
int pop (struct Stack *p)
{
    int x;
    if( p->tos == -1 )
    {
        printf("Stack Underflow");
        return -1;
    }
    x = p->arr[p->tos];
    p->tos = p->tos - 1;
    return x;
}
```

Modify the previous code so that now your program , displays 3 options to the user and performs actions according to the user's choice. The 3 options are:
1. PUSH
2. POP
3. QUIT

Make sure that program should terminate only when the user chooses option 3.

SAMPLE OUTPUT

==========

Select an operation:
1. PUSH
2. POP
3. QUIT

Enter your choice: 1
Enter ele to push:10
Pushed 10 successfully
Select an operation:
1. PUSH
2. POP
3. QUIT
Enter your choice:2

```
Popped 10
Select an operation:
1. PUSH
2. POP
3. QUIT
Enter your choice: 2
Stack underflow
Select an operation:
1. PUSH
2. POP
3. QUIT
Enter your choice: 4
Invalid choice. Try Again
Select an operation:
1. PUSH
2. POP
3. QUIT
Enter your choice:3
Thank you for using the app. Have a good day!
```