

Algorithms for Stack

Variables (Data)

```
int stack[SIZE]
int top;
```

Operations

Make Empty() // initializes an empty stack

```
top = -1;
```

Push() // add item to top of stack

```
top = top + 1;
stack[top] = newitem;
```

Pop() // remove item from top of the stack

```
newitem = stack[top];
top = top - 1;
```

IsEmpty() // checks to see if stack is empty

```
if ( top == -1)
{ // stack is empty
  return( 1);
} else
{ // stack is not empty
  return( 0 );
}
```

Isfull() // checks to see if stack is full

```
if ( top == SIZE)
{ // stack is full
  return( 1);
} else
{ // stack is not full
  return( 0 );
}
```

Top() // checks to see what is on the top of the stack without removing it

```
return( stack[top] )
```

