Pseudocode

```
Push (A, x)
  if Stack - full (A)
     Return null
else    top (A) = top (A) + 1
     A [top (A)] = x

Pop (A)
  if Stack - empty (A)
     Return null
else    top (A) = top (A) - 1
     A [top (A)+1]

Stack - empty (A)
     if top (A) = 0
     return true
  else return false

Stack - full (A)
  if top (A) = length (A)
     return True
else return false.
```

Algorithm for push

```
if Stack is full
    return null
end if

top = top + 1
Stack [top] = data

end
```

Algorithm for pop

```
if stack is empty
    return null
endif

data = Stack [top]
top = top - 1
return data

end
```