

atoi CONVERSION

★ In this problem, we are given a string and are supposed to convert it to a signed integer while abiding by a few rules

All whitespaces are to be ignored
If the string starts with a + or a -, that sign is to be taken into account.

Any non digit character will terminate our conversion

Answer must be wrapped to $\text{INT_MIN} (-2^{31})$ and $\text{INT_MAX} (2^{31} - 1)$

Pseudocode :

```
atoiConversion(str, N) {  
    result = 0  
    neg = false  
    nR = false  
    for(i = 0 → N-1) {  
        if(str[i] == ' ' && !nR) {  
            continue  
        }  
        if(str[i] == '-' && !nR) {  
            neg = true  
            nR = true  
            continue  
        }  
        if(str[i] == '+' && !nR) {
```

```
neg = false  
nR = true
```

```
continue
```

```
}
```

```
if (str[i] > '9') {
```

```
break
```

```
}
```

```
result = result * 10 + (int)str[i]
```

```
nR = true  
}
```

```
result = neg ? -1 * result : result
```

```
result = result > INT_MAX ? INT_
```

```
MAX
```

```
: result
```

```
result = result < INT_MIN ? INT_
```

```
MIN
```

```
: result
```

```
return result  
}
```