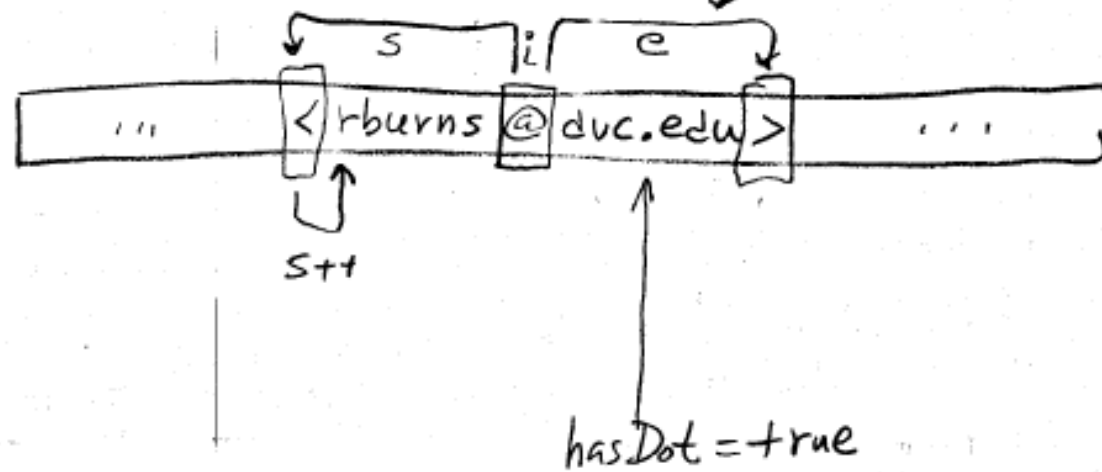


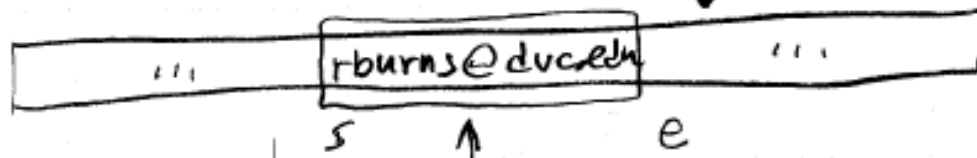
Valid email address

- *Email addresses consist of the characters A-Z, a-z, 0-9, underscore, dot, hyphen, and plus.*
- Also, they must have exactly one '@' followed by, but not adjacent to, at least one '.'

a line from input file ↗



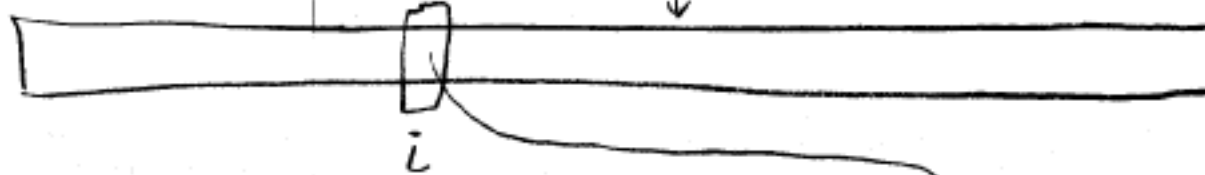
string lineFromFile;



string anEmail = lineFromFile.substr(s, e-s);

a "substring"

```
for (i=0; i < lineFromFile.length(); i++)
```



```
if (isValidEmailCharacter(lineFromFile[i])) ...
```

```
bool isValidEmailCharacter(char c)  
{
```

```
    bool result = false;
```

```
    ;
```

```
    return result;
```

```
}
```

← if c IS valid,
set result to
true ...

```

:
if character at i is '@'
  create s and set to same value as i
  decrement s
  if s < 0 ————— break
  if invalid email character at s ————— break
  increment s (to 1st valid char)

```

```

  create e and set to same value as i
  create hasDot & set to false
  increment e
  if e equals the line length ————— break
  if invalid email character at e ————— break
  if period at e,
    and hasDot = false then set: hasDot = true and dotPos = e

```

valid email address if = i = where @ is in string lineFromFile

- $s < i$ -- dotPos > i + 1
- $e > i$
- hasDot