

- R2.8
  - `s.length() + t.length()`
    - 10
  - `s.substring(1, 2)`
    - "e"
  - `s.substring(s.length()/2, s.length())`
    - "llo"
  - `s + t`
    - "HelloWorld"
  - `t + s`
    - "WorldHello"
- R2.16
  - `print substring(0,1)`
  - `print substring(string length -1, string length)`
  - `print substring(1, string length - 1)`
- R2.17
  - read each character of the string
  - print the first character
  - while reading, keep track of the previous character read
  - if the previous character as a space, print the current character
- R2.22

Given 5 for friday

starting position =  $5 * 3$

starting position is 15

0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
S	U	N	M	O	N	T	U	E	W	E	D	T	H	U	F	R	I	S	A	t

Take substring starting from 15 with length 3

15 16 17

F R I

- R2.23

say we want to switch positions 1 and 6

0	1	2	3	4	5	6	7	8	9	10
H	E	L	L	O		W	O	R	L	d

Substring from start to  $i - 1$

0

H

Substring from  $i + 1$  to  $j - 1$

2 3 4 5

L L O

Substring from  $j + 1$  to the end

7 8 9 10

O R L d

Start +  $j + \text{middle} + i + \text{end}$

0	1	2	3	4	5	6	7	8	9	10
H	W	L	L	O		E	O	R	L	d

- R2.24

- First character: Take a substring from position 0 to position 1
  - Last character: Take a substring from the length – 1 to length
  - Remove First: Take a substring from position 1 to length
  - Remove Last: Take a substring from position 0 to length – 1
- R7.1
  - Opening a file that doesn't exist
    - java.io.FileNotFoundException
  - Writing to a file that does not exist
    - It creates a new file with the specified name
- R7.2
  - Try to open a read only file
    - java.io.FileNotFoundException: output.txt (Permission denied)
- R7.3
  - It can lead to losing data or the data written to the output file to be incomplete
- R7.4
  - You use an escape sequence when trying to type a backslash (\\)

i. The default pen color is black

ii.

- 1) pen.setFont(new Font("SansSerif", Font.PLAIN, 18));
- 2) pen.drawString("When Pigs Fly", x, y);

iii. pen.setColor(Color.BLUE);

iv. For the class **java.awt.Graphics** in the Java Class Library:

- 1) drawRoundRect()
- 2) fillArc()
- 3) fill3DRect()
- 4) pen.fill3DRect(10, 10, 200, 300, true);