- Let Σ = {`void`, `int`, `double`, `name`, `(`, `)`, `,`, `;`}.
- Let's write a CFG for C-style function prototypes!
- Examples:
  - `void name(int name, double name);`
  - `int name();`
  - `int name(double name);`
  - `int name(int, int name, int);`
  - `void name(void);`

S → void A | int A | double A

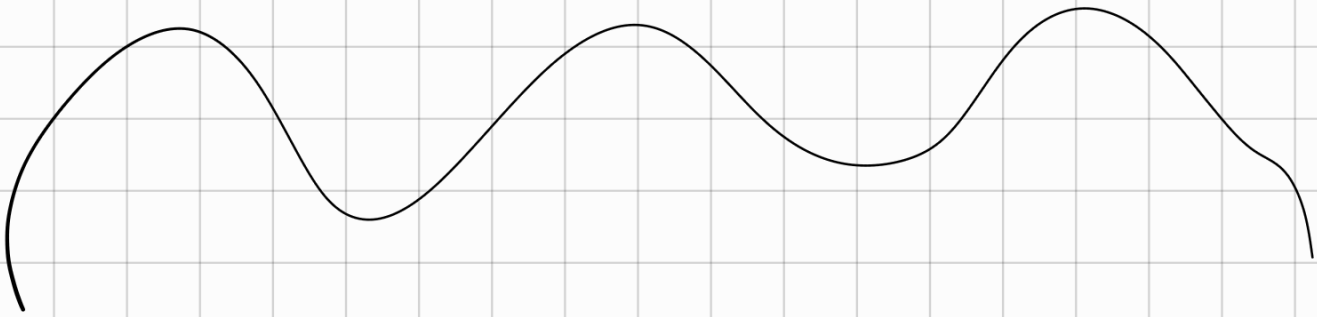
A → name B

B → (D | ( );

D → int name E | double name E | int E | double E | void E

E → , D | F

F →);



Language of balanced paranthesis e.g., ()((((()))))((())).....

$$S \rightarrow (S)|SS|\epsilon$$

How would you interpret the string "((((()))()())" using this grammar?

$S \rightarrow (AB)$

$A \rightarrow (A) \mid \varepsilon$

$B \rightarrow ()B \mid \varepsilon$

(AB)
((A) B)
(((A)) B)
((((A))) B)
(((( ))) B)
(((( ))) ()B)
(((( ))) ()()B)
((( ))) ()()()