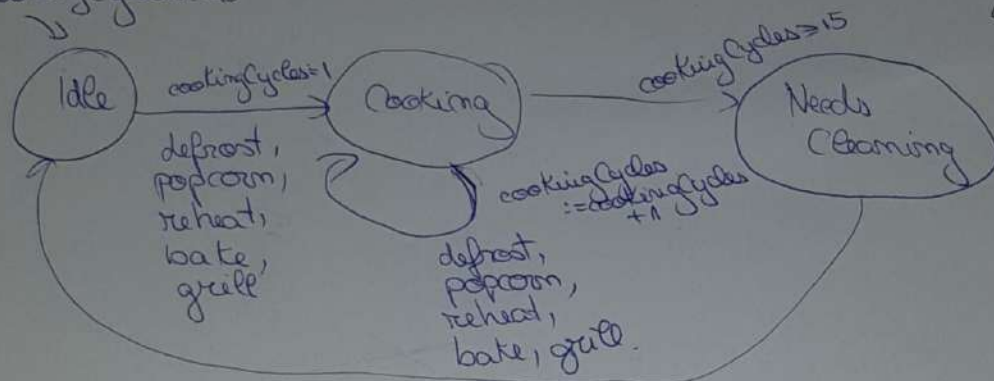


cookingCycles := 0



Non-deterministic

- States:
- Idle - microwave is ready to receive a request
  - Cooking - microwave is performing one of the tasks (defrost, popcorn, reheat, bake, grill)
  - Needs Cleaning - microwave has reached its max no. of cooking cycles (I chose 15 like the example) and requires cleaning.

Transitions:

Idle → Cooking: when the user inputs <sup>the first</sup> cooking request (one of the five)

Cooking → Cooking: when the user inputs cooking requests and their no. is smaller than the cooking cycles.

Cooking → Needs Cleaning: when the microwave completes the number of cooking cycles.

Needs Cleaning → Idle: when the cleaning process is complete, resetting the cycle count