Question 1

FLOWCHART

Start

Is it Halloween? —Yes→ Go Trick or Treating

No

Stop

Is there space in candy bag? —Yes→ Unvisited houses left on street? —Yes→ Continue knocking doors on current street
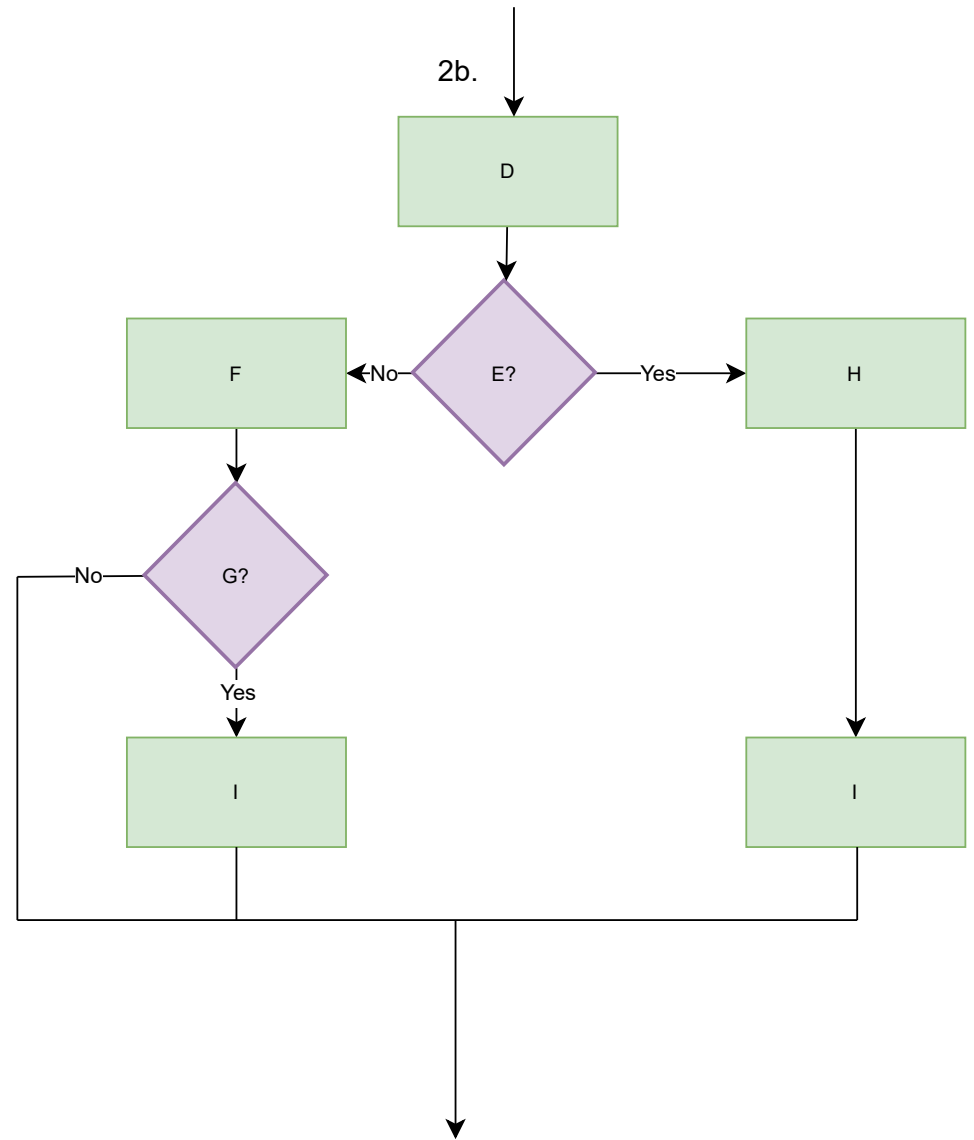
No → Go home

No → Move to another street
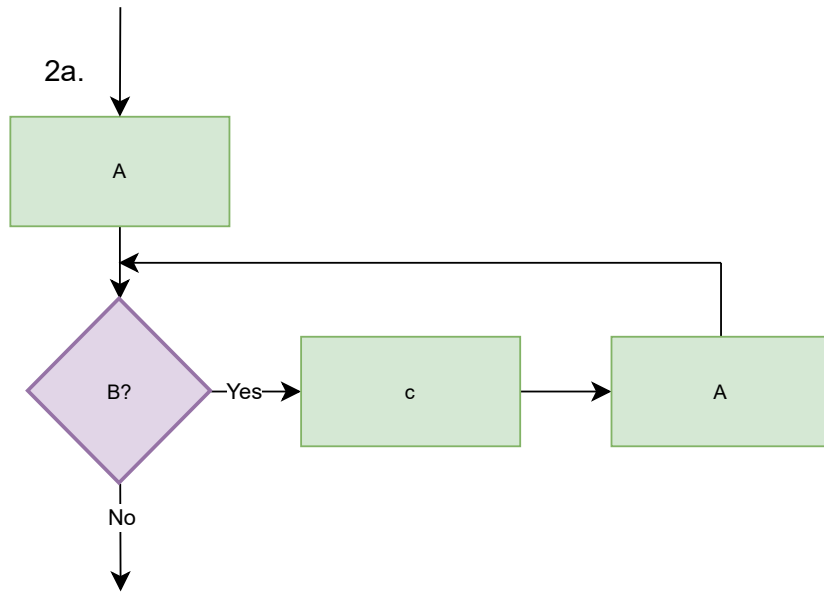
PSUEDO

Start
if it is halloween then
    go trick or treating
    while there is space in candy bag
        if there are unvisited houses left on current street then
            continue knocking on doors on current street
        else
            move to another street
        endif
    endwhile
    go home
endif
Stop

2a.

```
        │
        ▼
    ┌───────────┐
    │     A     │
    └───────────┘
        │
        ▼
      ◇ B? ◇ ──Yes──► ┌─────┐ ──► ┌─────┐
        │             │  c  │     │  A  │
        No            └─────┘     └─────┘
        │
        ▼
```

2b.

```
              │
              ▼
          ┌───────┐
          │   D   │
          └───────┘
              │
              ▼
  ┌─────┐  ◇ E? ◇ ──Yes──► ┌─────┐
  │  F  │◄─No               │  H  │
  └─────┘                   └─────┘
     │                         │
     ▼                         │
  ◇ G? ◇ ──No                  ▼
     │                      ┌─────┐
    Yes                     │  I  │
     ▼                      └─────┘
  ┌─────┐
  │  I  │
  └─────┘
```

2c.

```
                    ↓
                 ┌──────┐
                 │  K   │
                 └──────┘
                    │
                    ↓
    ┌──────┐     ◇─────◇      ┌──────┐
    │  M   │◄─No─│ L?  │─Yes►│  P   │
    └──────┘     ◇─────◇      └──────┘
       │                         │
       ↓                         ↓
    ┌──────┐              ◇─────◇      ┌──────┐
    │  N   │              │ Q?  │────►│  P   │
    └──────┘              ◇─────◇      └──────┘
       │                     │
       ↓                     ↓
    ◇─────◇               ┌──────┐
    │ Q?  │               │  R   │
    ◇─────◇               └──────┘
       │
       ↓
    ┌──────┐
    │  R   │
    └──────┘
```

2d.

```
                         ↓
                      ┌──────┐
                      │  S   │
                      └──────┘
                         │
                         ↓
    ┌──────┐          ◇─────◇          ┌──────┐
    │  U   │◄───No────│ T?  │───Yes───►│  Y   │
    └──────┘          ◇─────◇          └──────┘
       │                                  │
       ↓                                  ↓
    ┌──────┐                           ◇─────◇
    │  V   │                           │  Z   │
    └──────┘                           ◇─────◇
       │                                  │
       ↓            ┌──────┐              
    ◇─────◇         │  V   │◄───Yes───    
    │ W?  │         └──────┘              
    ◇─────◇                               
       │                                  
      No           No
       ↓            ↓                      ↓
    ┌──────┐    ┌──────┐              ┌──────┐
    │  A   │    │  X   │              │  A   │
    └──────┘    └──────┘              └──────┘
```

6

```
         │
         ▼
    ┌─────────┐
    │ #1-100  │
    └─────────┘
         │
    ┌────┘
    │    ▼
┌──────────┐   ◇─────────◇
│Tell User │◄─Yes─│INCORRECT?│
│  H/L     │   ◇─────────◇
└──────────┘        │
                   No
                    │
                    ▼
              ┌──────────┐
              │Tell User │
              │they are  │
              │ correct  │
              └──────────┘
                    │
                    ▼
```
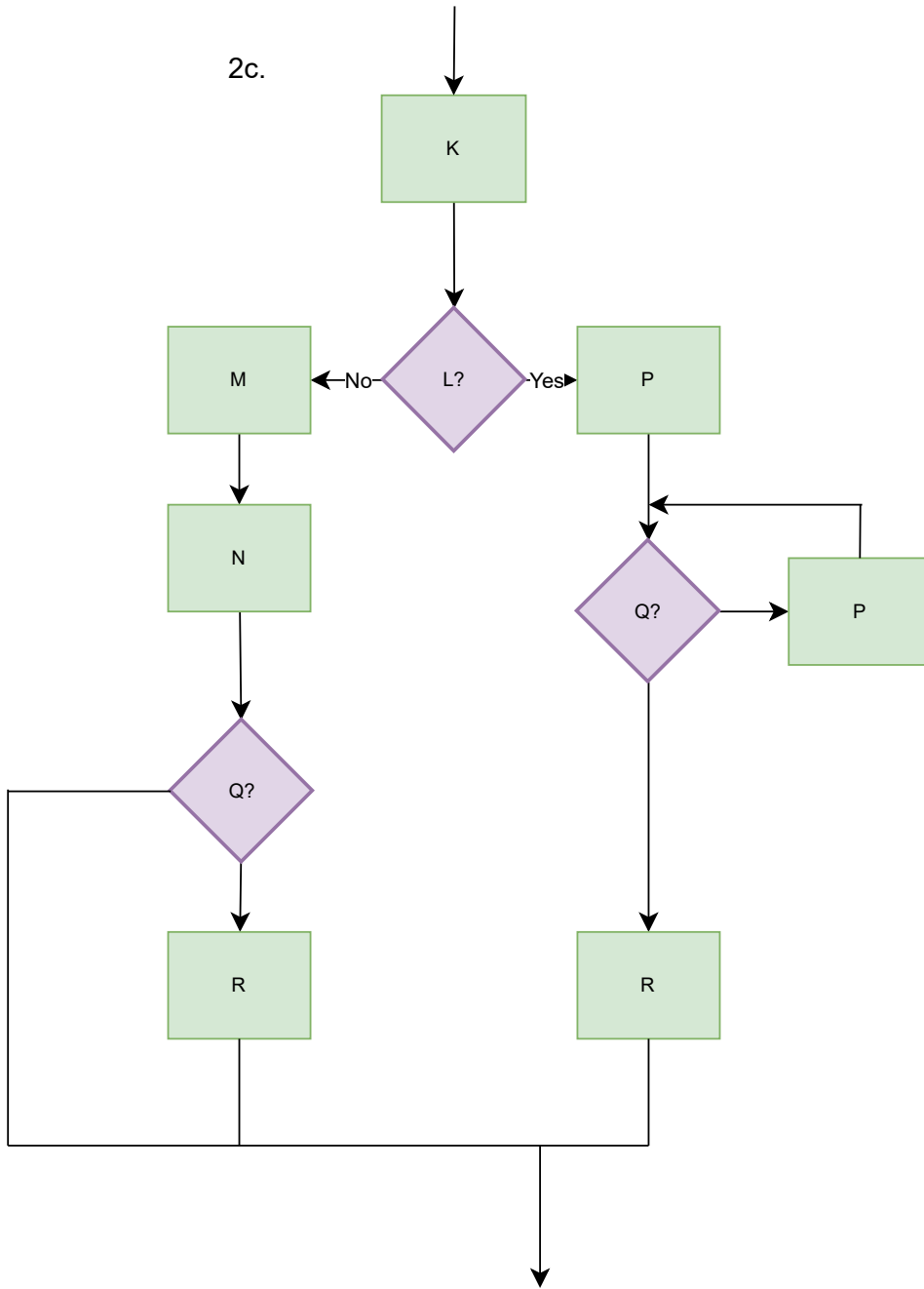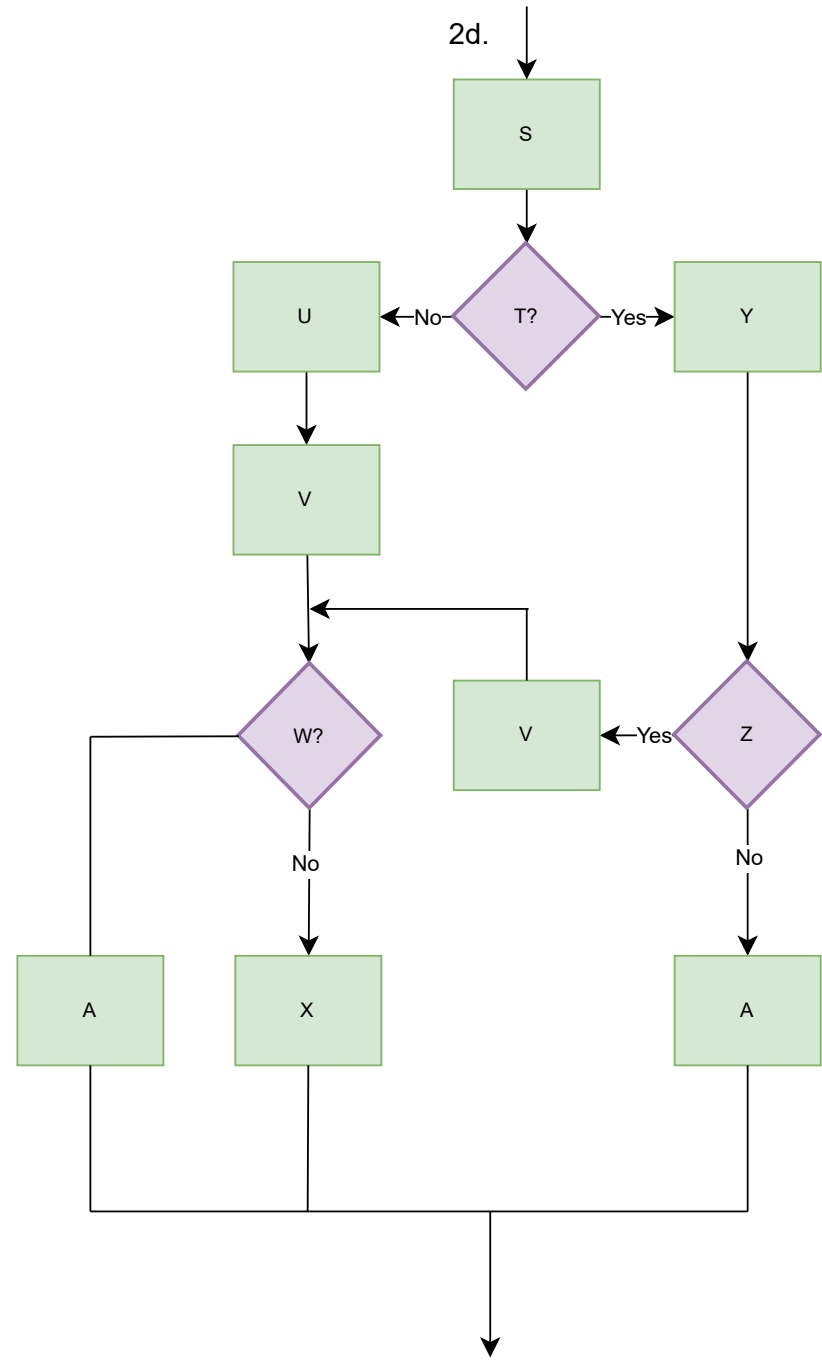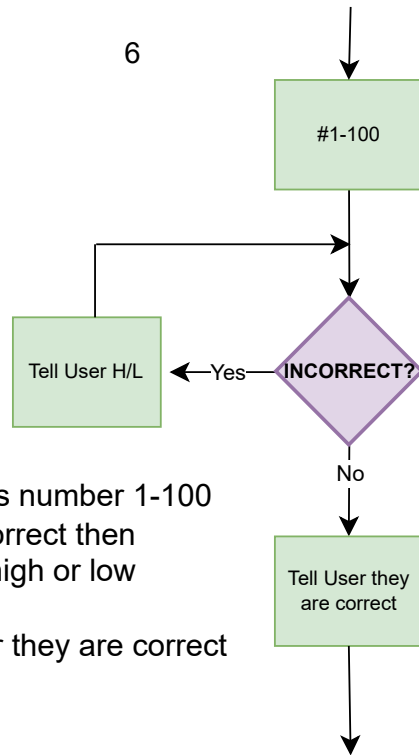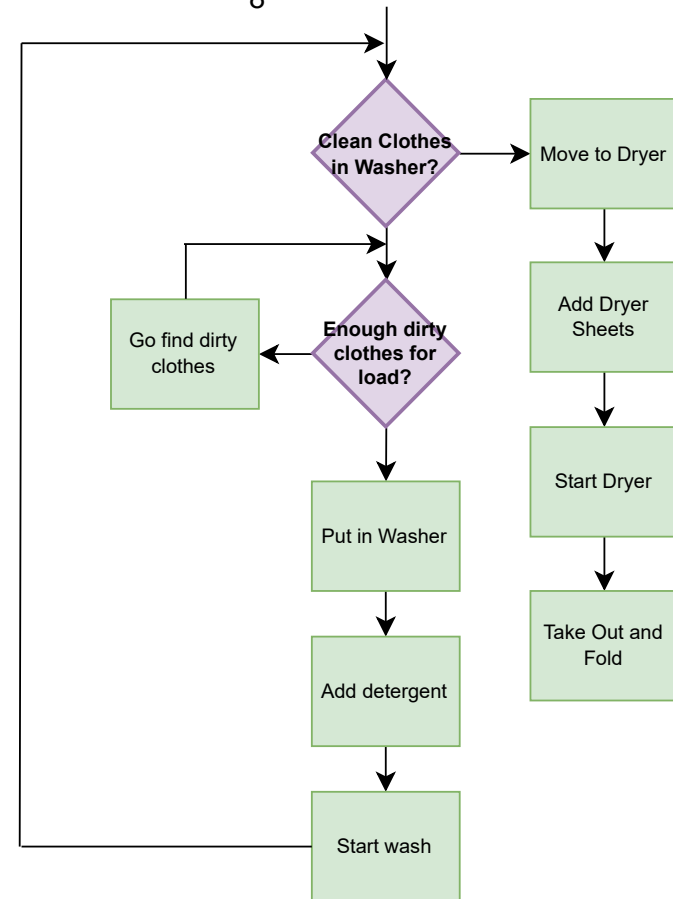
user guesses number 1-100
    if it is incorrect then
  tell user high or low
  else
    tell user they are correct
  endif

8

```
  ┌──────────────────────────┐
  │                          ▼
  │                   ◇──────────────◇
  │                   │ Clean Clothes │──►┌──────────┐
  │                   │  in Washer?   │   │ Move to  │
  │                   ◇──────────────◇    │  Dryer   │
  │                          │            └──────────┘
  │    ┌─────┘               │                 │
  │    │        ◇──────────────◇               ▼
  │ ┌──────────┐│ Enough dirty │         ┌──────────┐
  │ │Go find   │◄│ clothes for  │         │Add Dryer │
  │ │dirty     │ │    load?     │         │  Sheets  │
  │ │clothes   │ ◇──────────────◇         └──────────┘
  │ └──────────┘        │                      │
  │                     ▼                      ▼
  │              ┌──────────┐            ┌──────────┐
  │              │ Put in   │            │  Start   │
  │              │ Washer   │            │  Dryer   │
  │              └──────────┘            └──────────┘
  │                     │                      │
  │                     ▼                      ▼
  │              ┌──────────┐            ┌──────────┐
  │              │   Add    │            │ Take Out │
  │              │detergent │            │ and Fold │
  │              └──────────┘            └──────────┘
  │                     │
  │                     ▼
  │              ┌──────────┐
  └──────────────│  Start   │
                 │  wash    │
                 └──────────┘
```

10 - I hate to say it but I've never wrapped presents. I cannot bring myself to watch a video about it.