Turiba University

LAUNCE MADNAWAT

HISTORY OF PROGRAMMING

PROFESSIONAL BACHELOR THESIS

computer systems

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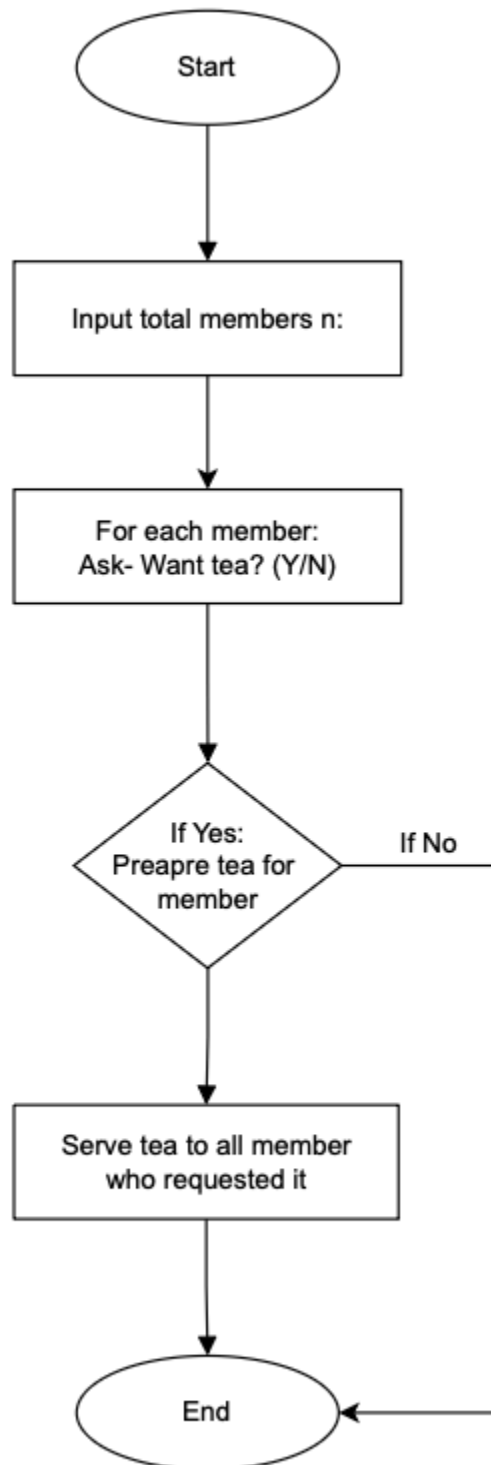
Thesis **Advisor:**   **(Jānis Pekša Dean of IT**

REPORT ON FLOWCHARTS

Classmate : Sonam
Flowchart 1 : Tea to groupmate

```
            ┌─────────┐
            │  Start  │
            └─────────┘
                 │
                 ▼
        ┌────────────────────┐
        │ Input total members n: │
        └────────────────────┘
                 │
                 ▼
        ┌────────────────────┐
        │   For each member:    │
        │ Ask- Want tea? (Y/N)  │
        └────────────────────┘
                 │
                 ▼
              ◇ If Yes:          If No
             Preapre tea for ──────────┐
               member                  │
                 │                     │
                 ▼                     │
        ┌────────────────────┐         │
        │ Serve tea to all member │     │
        │   who requested it    │      │
        └────────────────────┘         │
                 │                     │
                 ▼                     │
            ┌─────────┐                │
            │   End   │◄───────────────┘
            └─────────┘
```

MY REVIEWS ON ABOVE FLOWCHART :

This flowchart basically walks through how tea is served to a group. You start by checking how many people are there. Then you go around and ask each person individually if they'd like a cup of tea. If someone says yes, you make tea for them; if they say no, you just continue to the next person. After everyone has been asked, you serve tea only

What I like about the flowchart:-

1. Clear sequence: The flow starts from Start → Input → Ask → Decision → Serve → End. Nicely structured.

Easy to understand: Anyone reading it can follow the logical Steps

Use of proper shapes:

Oval for Start/End

Rectangle for process

Diamond for decision

What I think are the areas for improvement:-

1. Spelling corrections

"Preapre" ought to mean "Prepare."

In several contexts, "member" should be members.

"Serve tea to every member" => Serve tea to every member

The flowchart appears more professional with a few minor spelling corrections.

2. Loop arrow clarity

The "If No" arrow is a little unclear.
To better illustrate the iteration, it should refer back to the step "For each member: Ask Want tea?" Currently, it loops toward the finish, but a correct loop typically goes back to the requesting stage or the decision-making process.

3. The loop end is missing.

The flowchart should display the following once each member is asked:

Proceed to the next member.or cease inquiring after every member is covered.
This section lacks visual clarity.
You might also include:
Is the list of members finished? (Y/N)
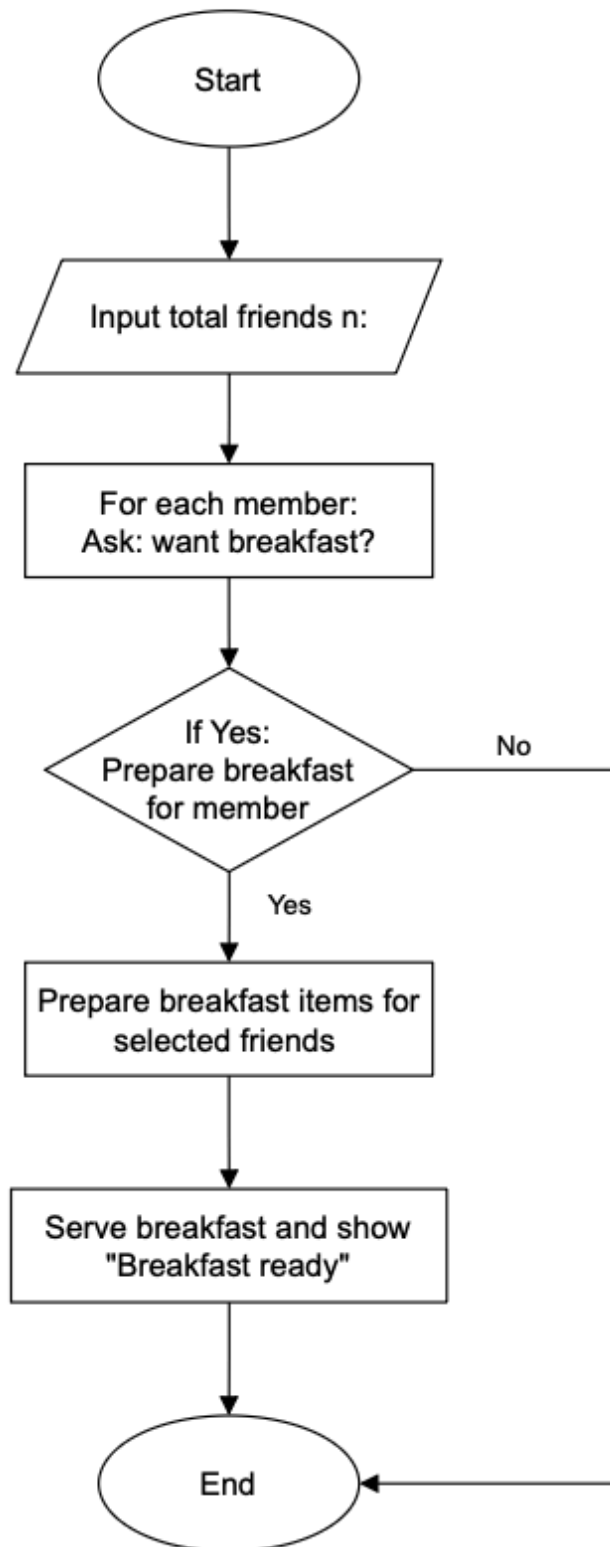If so, proceed to the serving step.
Return to "Ask Want tea" if the answer is "no."

🌟 Overall rating

9 / 10

Excellent work, readable, and nearly perfect organization.
It just needs a few grammar corrections and some looping clarity enhancements.

Flowchart 2 : Breakfast to friends

```
                    ┌─────────────┐
                   (    Start      )
                    └──────┬──────┘
                           │
                           ▼
              ╱──────────────────────────╲
             ╱   Input total friends n:    ╲
             ╲                             ╱
              ╲──────────────────────────╱
                           │
                           ▼
              ┌──────────────────────────┐
              │     For each member:      │
              │    Ask: want breakfast?   │
              └─────────────┬────────────┘
                           │
                           ▼
                      ◇─────────◇
                    ╱  If Yes:    ╲          No
                   ◇  Prepare breakfast ◇────────────┐
                    ╲  for member ╱                  │
                      ◇─────────◇                    │
                           │                         │
                          Yes                        │
                           ▼                         │
              ┌──────────────────────────┐          │
              │ Prepare breakfast items for│          │
              │     selected friends       │          │
              └─────────────┬────────────┘          │
                           │                         │
                           ▼                         │
              ┌──────────────────────────┐          │
              │  Serve breakfast and show  │          │
              │    "Breakfast ready"       │          │
              └─────────────┬────────────┘          │
                           │                         │
                           ▼                         │
                    ┌─────────────┐                  │
                   (     End       )◄─────────────────┘
                    └─────────────┘
```

MY REVIEWS ON ABOVE FLOWCHART :

This flowchart basically walks through how breakfast is served to friends. You start by checking how many people are there. Then you go around and ask each person individually if they'd like breakfast. If someone says yes, you make breakfast for them; if they say no, you just continue to the next person. And then just prepare breakfast and serve breakfast to friends.

What I like about the flowchart:

1. Clarity and Simplicity: This chart's simplicity is its greatest asset. The goal is instantly apparent: organizing breakfast preparation according to friends' preferences. The procedures make sense and are simple to follow.

2. Good Logical Structure: It employs basic flowchart components correctly:

The Start/End terminals are clearly marked. The "For each member" loop and the decision diamond effectively imply the process of iterating through each friend. The decision point ("want breakfast?") is a classic and correct use of a diamond shape, leading to a clear "Yes" or "No" path.

3. Practical Outcome: The flowchart provides a whole story by concluding with the tangible results of preparing and serving the products, rather than merely modeling the decision.
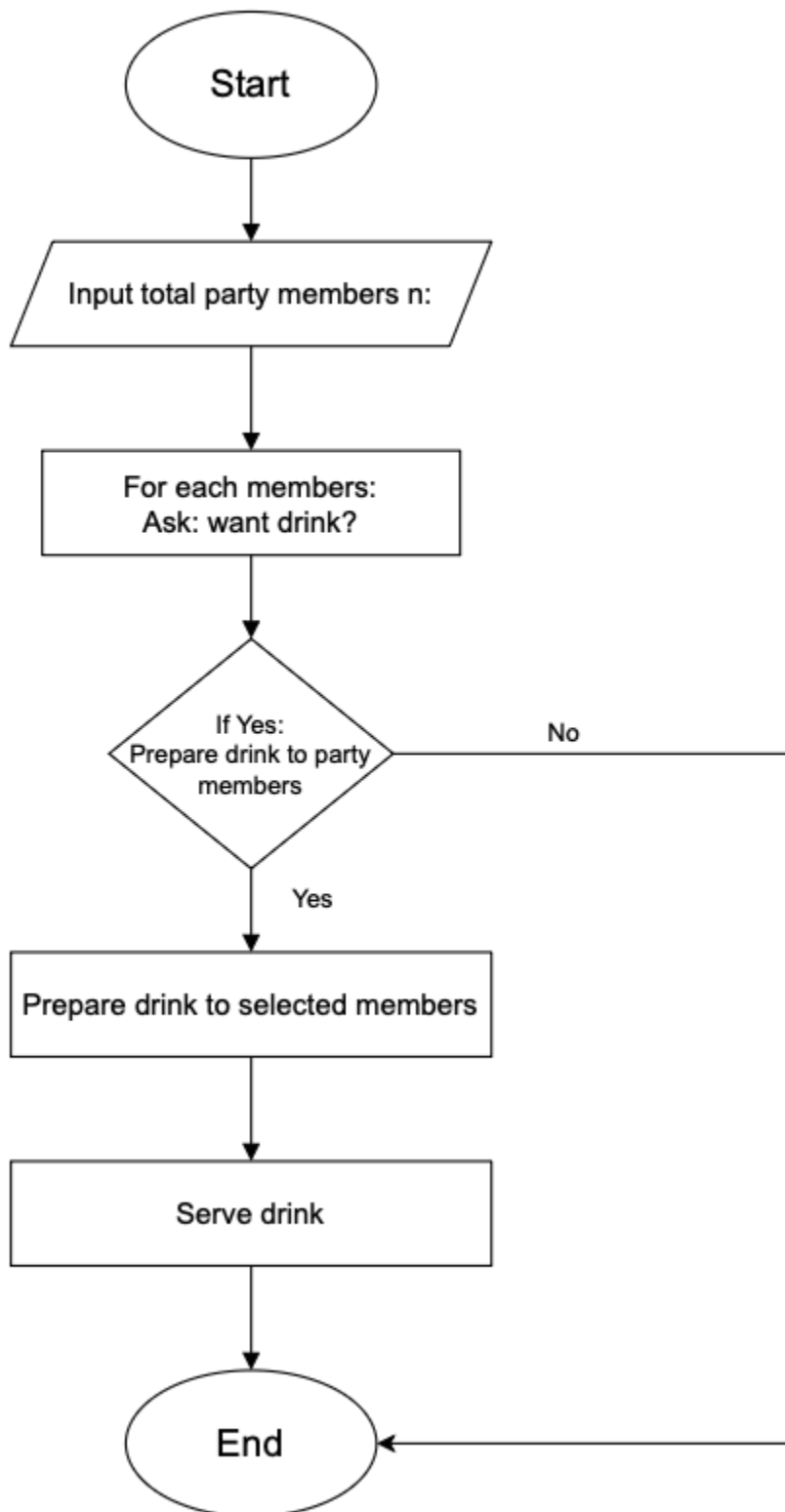
What I think are the areas for improvement:-

1. Add "All friends asked?" and make sure the loop is closed correctly.

2. Modify "Prepare breakfast" to "Add meal to order"

3. Put "Skip friend" on No branch.

4. For a cleaner appearance, use digital shapes.

🌟 **Overall rating**

9 / 10

For its primary function of clearly conveying a basic procedure, it's an excellent flowchart. It wins marks for being instantly comprehensible and logically reasonable, but it loses points for technical correctness (loop handling, branch clarity). Rather than correcting basic mistakes, the suggested modifications focus on making it "bulletproof" and expertly polished.

Flowchart 3 : Drink to party member

```
                    ┌─────────────┐
                    │    Start    │
                    └──────┬──────┘
                           │
                           ▼
              ╱─────────────────────────╲
             ╱  Input total party members n: ╲
             ╲─────────────────────────╱
                           │
                           ▼
                  ┌──────────────────┐
                  │ For each members: │
                  │  Ask: want drink? │
                  └─────────┬─────────┘
                            │
                            ▼
                          ◇
                         ╱ ╲
                        ╱   ╲      No
              If Yes:  ◇     ◇─────────────────┐
           Prepare drink to party              │
              members  ╲   ╱                   │
                        ╲ ╱                     │
                         ◇                      │
                         │ Yes                  │
                         ▼                      │
            ┌────────────────────────────┐      │
            │ Prepare drink to selected   │      │
            │         members             │      │
            └─────────────┬──────────────┘      │
                          │                      │
                          ▼                      │
            ┌────────────────────────────┐      │
            │        Serve drink          │      │
            └─────────────┬──────────────┘      │
                          │                      │
                          ▼                      │
                   ┌─────────────┐               │
                   │     End     │◄──────────────┘
                   └─────────────┘
```

MY REVIEWS ON ABOVE FLOWCHART :

This flowchart basically walks through how drinks is served to party members. You start by checking how many people are there. Then you go around and ask each person individually if they'd like drinks. If someone says yes, you make drink for them; if they say no, you just continue to the next person. And then just prepare drink and serve drink to party member.

What I like about the flowchart:-

Easy-to-follow, straightforward reasoning Good fundamental framework with beginning and ending points Realistic situation in practice

What I think are the areas for improvement:-

1. Missing loop termination: "all members processed" is not checked.

2. The "No" branch should indicate that the member has been skipped.

3. It is possible to combine redundant "Prepare drink" stages.

4. The handwritten format doesn't look professional.

🌟 **Overall rating**

9 / 10

The flowchart is useful for basic comprehension, but it requires technical adjustments to handle looping logic correctly and remove duplication.