Name : MD. Tahomeed Islam

ID : 0112420157
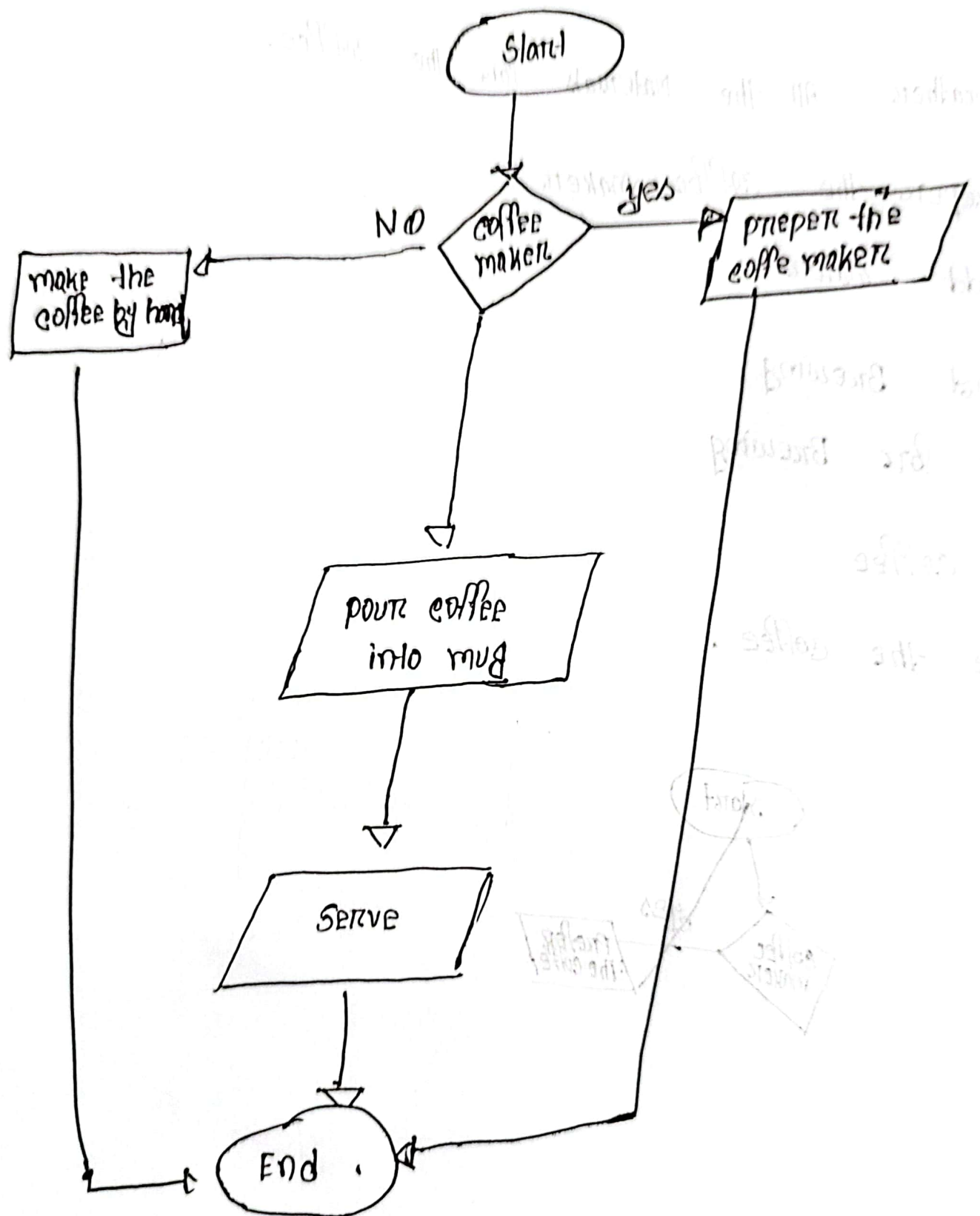
Sec : G

Course code: 1110

Step 1 :   Gather   All the   materials for the   coffee.

Step 2 :   Prepere   the   Coffee maker

Step 3 :   Add   water

Step 4 :   Start   Brewing

Step 5:   Wait for   Brewing

Step 6 :   Pour   Coffee

Step 7 :   Serve the coffee.

Start

```
                           ┌──────────┐
                           │  Start   │
                           └────┬─────┘
                                │
                                ▽
              NO           ◇─────────◇          yes
     ┌────────────────────<    coffee    >────────────────────┐
     │                    │   maker      │                    │
     ▽                    ◇─────────◇                    ▽
┌──────────────┐              │                   ┌──────────────┐
│ make the     │              │                   │ prepere the  │
│ coffee by hand│             ▽                   │ coffe maker  │
└──────┬───────┘       ┌──────────────┐           └──────┬───────┘
       │               │ pour coffee  │                  │
       │               │  into mug    │                  │
       │               └──────┬───────┘                  │
       │                      ▽                           │
       │               ┌──────────────┐                  │
       │               │   Serve      │                  │
       │               └──────┬───────┘                  │
       │                      │                           │
       │                  ▽   ╭─────────╮  ◁              │
       └─────────────────────▷│   End   │◁───────────────┘
                              ╰─────────╯
```

2 No

Step 1 :   Start

Step 2 :   Input radius

Step 3 :   Set π

Step 4 :   Calculate area = $\pi \times radius^2$

Step 5 :   Output area

Step 6 :   Stop

Flow chart:

```
        ┌─────────┐
        │  Start  │
        └────┬────┘
             │
             ▽
      ╱─────────────╱
     ╱ input radius ╱
    ╱─────────────╱
             │
             ▽
      ┌───────────────┐
      │    set  π     │
      └───────┬───────┘
              │
              ▽
      ┌───────────────┐
      │ calculate Area: │
      │   π × radius²  │
      └───────┬───────┘
              │
              ▽
      ╱───────────────╱
     ╱  Output area  ╱
    ╱───────────────╱
              │
              ▽
        ┌─────────┐
        │  End .  │
        └─────────┘
```
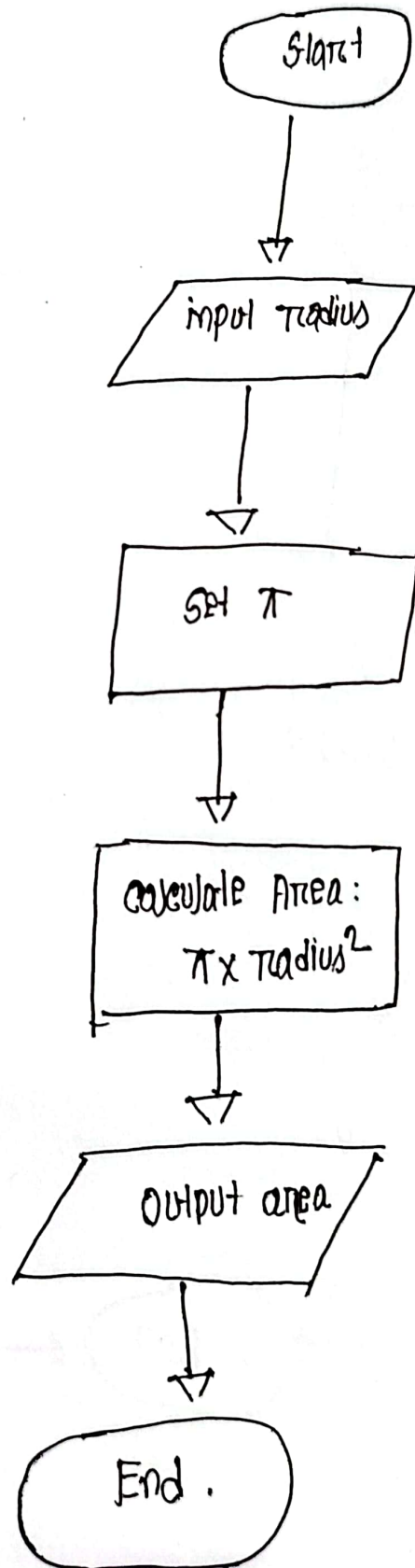
3.

Step 1 : Arrive at gate

Step 2 : Punch ID Card

Step 3 : / Gate opens

Step 4 : Yes.

Step 5 : Enter University

Step 6 : No

Step 7 : Ask for help

4 no Ans:

Start

Arrive at gate

Punch ID Card

Gate Open

No

yes

Ask for help

Enter University

End

6· No

```
                    ( Start )
                        │
                        ▼
                  / input marks /
                        │
                        ▼
                   ◇ is mark        yes
                   90<=        ─────────►  [ Grade = A ] ──────┐
                        │                                      │
                        │ No                                   │
                        ▼                                      │
                   ◇ is mark        yes                        │
                   90>80<=     ─────────►  [ Grade = B ] ──────┤
                        │                                      │
                        │ No                                   │
                        ▼                                      │
                   ◇ is mark        yes                        │
                   80>70<=     ─────────►  [ Grade = C ] ──────┤
                        │                                      │
                        │ No                                   │
                        ▼                                      │
                   ◇ is mark        yes                        │
                   70>60<=     ─────────►  [ Grade = D ] ──────┤
                        │                                      │
                        │ No                                   │
                        ▼                                      │
                   ◇ is mark        yes                        │
                   <=59        ─────────►  [ Grade = F ] ──────┤
                        │                                      │
                        ▼                                      │
                    ( End ) ◄─────────────────────────────────┘
```