## Start Program

Initialize an empty dictionary called users

```
Define function input_number(prompt):
  Loop forever:
    Try to input a number
    If valid, return the number
    If invalid, show "Invalid input" message
Define function register():
  Display "Registration"
  Input username
  If username already exists in users:
    Show "Username already exists"
    Return
  Input password
  Save username and password in users
  Show "Registration Successful"
Define function login():
  Set attempts to 3
  While attempts > 0:
    Display "Log In"
    Input username
    Input password
    If username and password match:
       Show "Login Successful"
       Return True
    Else:
       Decrease attempts by 1
       Show "Invalid credentials, attempts left"
       If attempts == 0:
         Ask user "Do you want to register instead? (Y/N)"
         If Yes:
```

Return None

```
Return False
Define function input data():
  Input age
  Loop until valid gender input (M/F):
    Input gender
    If gender is M or F, continue
    Else, show "Invalid gender"
  Input weight
  Input height in cm
  Convert height to meters
  Calculate BMI = weight / (height * height)
  Display BMI
  If BMI < 18.5:
    Display "Underweight advice"
  Else if BMI between 18.5 and 24.9:
    Display "Healthy weight advice"
  Else if BMI between 25 and 29.9:
    Display "Overweight advice"
  Else:
    Display "Obese advice"
  Show user's age and gender
Define function weight_loss_plan():
  Display "Weight Loss Plan"
  Call input_data()
  Display weight loss tips
Define function stay_healthy_plan():
  Display "Stay Healthy Plan"
  Call input_data()
  Display healthy food and activity tips
```

Define function gain\_muscle\_plan():

Else:

Reset attempts to 3

```
Display "Gain Muscle Plan"
  Call input_data()
  Display muscle gain tips
Define function mental_wellness_plan():
  Display "Mental Wellness Plan"
  Call input_data()
  Display mental health tips
Define function energy_boost_plan():
  Display "Energy Boost Plan"
  Call input_data()
  Display energy boosting tips
Define function heart_health_plan():
  Display "Heart Health Plan"
  Call input_data()
  Display heart health tips
Define function core_strength_plan():
  Display "Core Strength Plan"
  Call input_data()
  Display core strength tips
Define function sleep_quality_plan():
  Display "Sleep Quality Plan"
  Call input_data()
  Display sleep quality tips
Define function run_app():
  Display "Welcome to HealthTrack"
  Loop forever:
    Ask user if they have an account (1. Log in, 2. Register)
     If 1:
       Call login()
       If login successful, break loop
```

```
If user chose to register after failed login, call register()

Else if 2:

Call register()

Else:

Show "Invalid option"

After login:

Display health goal options

Input goal selection

Based on selection, call the corresponding plan function

If invalid goal, show "Invalid selection"

Call run_app()
```

End Program