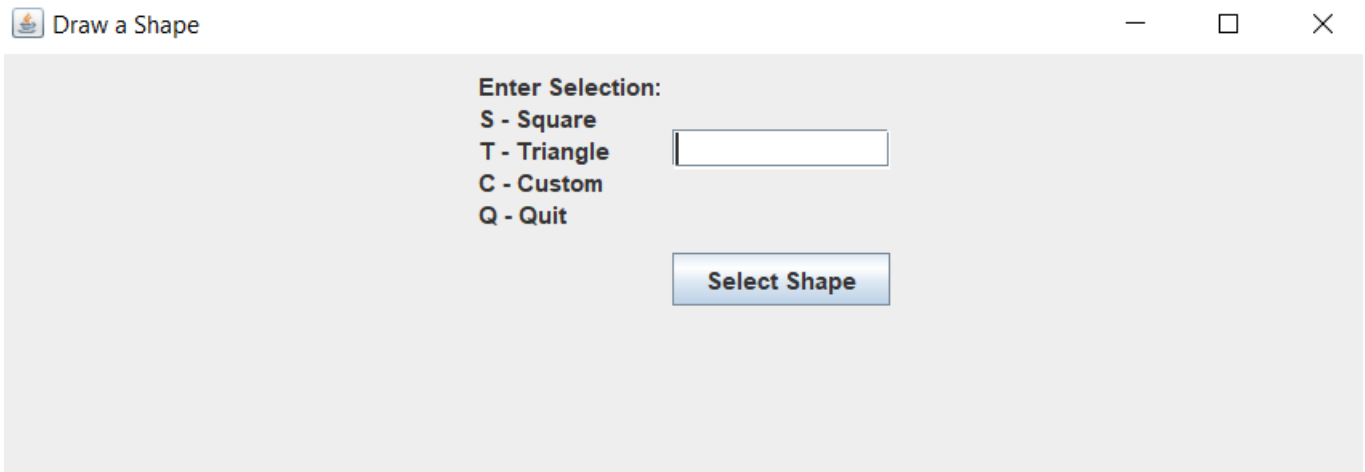


Draw a shape  
User manual



### 1.1 Starting the program

To begin user should place the finch on level ground, this will display the initial form as seen below.



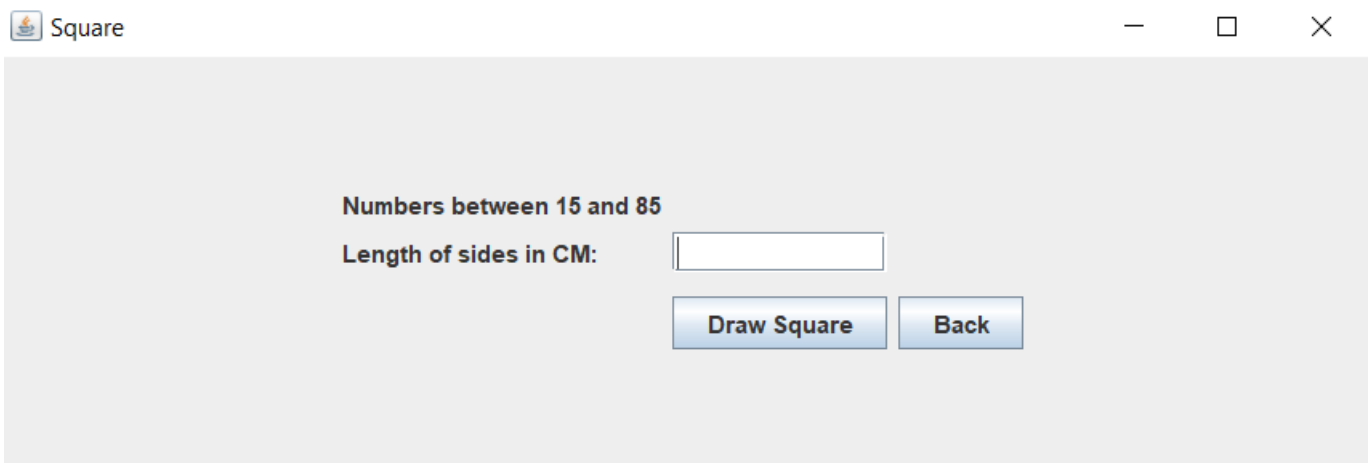
The screenshot shows a window titled "Draw a Shape" with a standard Windows-style title bar (minimize, maximize, close buttons). The window has a light gray background. On the left side, there is a list of options: "Enter Selection:", "S - Square", "T - Triangle", "C - Custom", and "Q - Quit". To the right of this list is a text input field. Below the input field is a button labeled "Select Shape".

### 1.2 User input

User should enter which shape they wish to be drawn from the choices given, S for Square, T for Triangle, C for a custom polygon or Q to quit and write all drawn shapes to a text file. Incorrect inputs will prompt the user and allow them to re-enter.

### 2.1 Shapes

When users choses to draw a Square the program will display the following form.

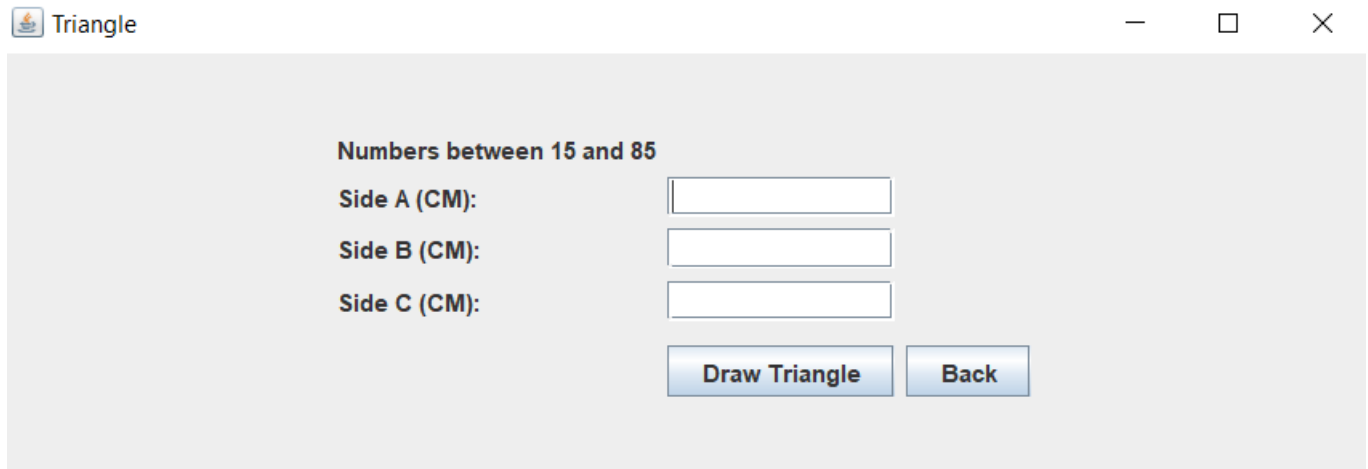


The screenshot shows a window titled "Square" with a standard Windows-style title bar. The window has a light gray background. In the center, there is a text label "Numbers between 15 and 85" followed by "Length of sides in CM:". To the right of this text is a text input field. Below the input field are two buttons: "Draw Square" and "Back".

To draw a Square the user should enter a positive whole number between 15 and 85. Once the number has been entered the finch will begin drawing the shape and once complete the finch will beep and the program will return to the initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.

## 2.2 Triangle

When users choses to draw a Triangle the program will display the following form.

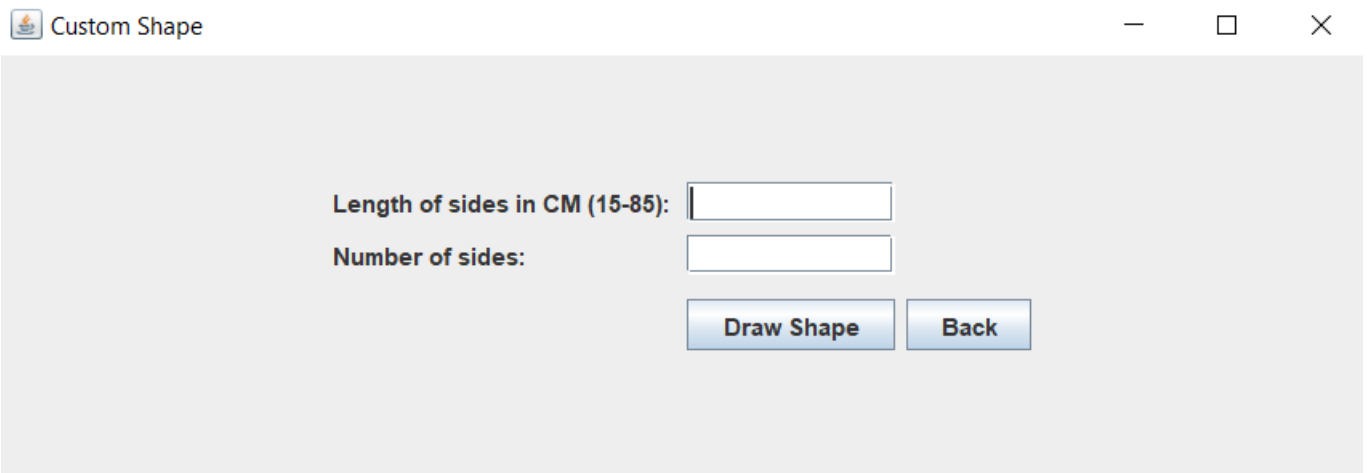


The screenshot shows a window titled "Triangle" with standard Windows window controls (minimize, maximize, close). The window has a light gray background. At the top, the text "Numbers between 15 and 85" is displayed. Below this, there are three labels: "Side A (CM):", "Side B (CM):", and "Side C (CM):", each followed by a white text input box. At the bottom of the form, there are two blue buttons with white text: "Draw Triangle" and "Back".

To draw a Triangle the user should enter three positive whole numbers between 15 and 85, the program will check that the given sides can form a triangle. Once the numbers have been validated the finch will begin drawing the shape and once complete the finch will beep and the program will return to the initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.

## 2.3 Custom

When users choses to draw a custom polygon the program will display the following form.



The screenshot shows a window titled "Custom Shape" with standard Windows window controls (minimize, maximize, close). The window has a light gray background. At the top, the text "Length of sides in CM (15-85):" is displayed, followed by a white text input box. Below this, there is a label "Number of sides:" followed by another white text input box. At the bottom of the form, there are two blue buttons with white text: "Draw Shape" and "Back".

To draw a Custom polygon the user should enter a positive whole number in the "Length of sides box" the number should be between 15 and 85, the user should also enter a whole number 5 or higher, if user requires the finch to draw a three or four sided shape they should choose another option. Once valid numbers have been entered the finch will begin drawing the shape, once complete the finch will beep and program will return to initial form. Incorrect inputs will prompt the user and allow them to re-enter, and the user can return to the selection screen by pressing the back button.