# Project

# Programming Fundamental



Submitted By:

Muhammad Waqas Zafar, Mr. Fuzail Raza

Submitted To:

Khola Naseem

Sap Id’s:

38605,39091(CS-1C)

Department of Computer Science

Riphah International university, Lahore

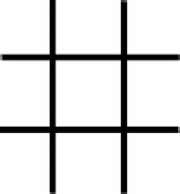
# A Project OF

# “Tic Tac Toe Game”

Our project name is Tic-Tac-Toe game. This game is very popular and is fairly simple by itself. It is actually a two-player game. In this game, there is a board with n x n squares. In our game, it is 3 x 3 squares. The goal of Tic-Tac-Toe is to be one of the players to get three same symbols in a row – horizontally, vertically or diagonally – on a 3 x 3 grid.

## Overview.

This Game can be played in a 3x3 grid. The game can be played by two players. There are two options for players. This Game will be look like this.



## Theory of Game:

A player can choose between two symbols with his opponent, usual games use “X” and “O”. If first player chooses “X” then the second player have to play with “O” and vice versa. A player marks any of the 3x3 squares with his symbol (may be “X” or “O”) and his aim is to create a straight line horizontally or vertically or diagonally with two intensions:

a) Create a straight line before his opponent to win the game.

b) Restrict his opponent from creating a straight line first.

In case logically no one can create a straight line with his own symbol, the game results a tie. Hence there are only three possible results – a player wins, his opponent wins or it’s a tie.

|  |  |  |
| --- | --- | --- |
| 1 | 2 | 3 |
| 4 | 5 | 6 |
| 7 | 8 | 9 |

If any player is able to draw three Xs or three Os in the following combinations then that player wins. The combinations are:

a) 1, 2, 3 b) 4, 5, 6

c) 7, 8, 9 d) 1, 4,

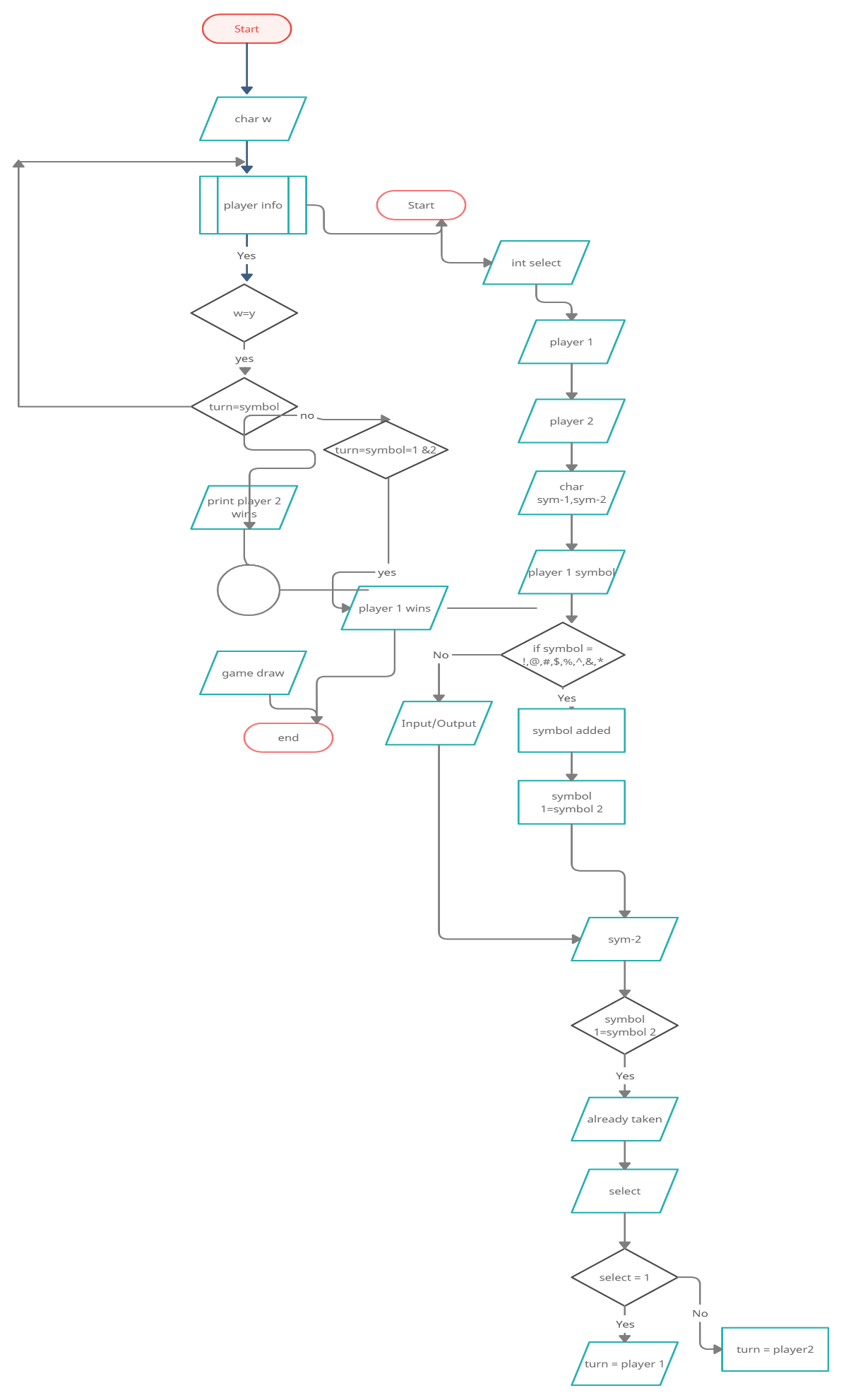
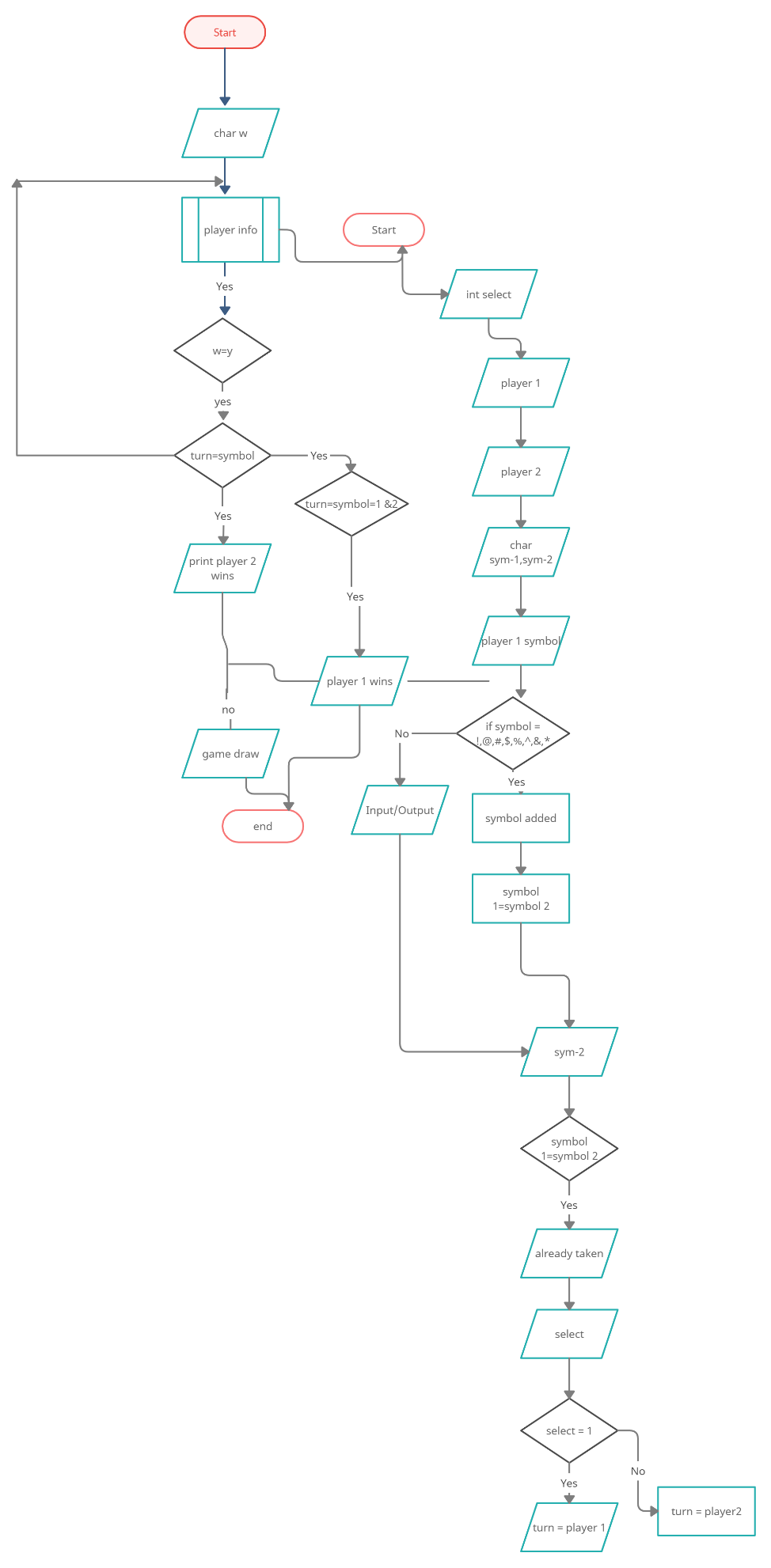
e) 2, 5,8 f) 3, 6, 9

h) 1, 5,9 i)3, 5, 7

# Review:

* Welcome screen will be show.
* Both Player will enter their names.
* Both Player Will Chose their symbols.
* Then one of the players chose his turn that who wants to play first.
* Then Game will start and 3X3 matrices board display’s and players will play the game.
* There are three conditions 1. Game continue 2. Game over 3. Game draw.

**Flow Chart:**



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