

## Conditionals

No.	Title	Description	Completed	Play
1	Determina a even number	Define a function isEven(number) that takes in a number as an argument and returns True if it is an even number.	✓	▶
2	Checking Isosceles Triangle	Write a function isIsosceles(x, y, z) that accepts the 3 sides of a triangle as inputs. The function should return True if it is an isosceles triangle. An isosceles triangle has 2 equal sides. An equilateral triangle is a special case of isosceles triangle.	✓	▶
3	Checking Scalene Triangle	Write a function isScalene(x, y, z) that accepts the 3 sides of a triangle as inputs. The function should return True if it is a scalene triangle. A scalene triangle has no equal sides.	✓	▶
4	Fitness Standard	Define a function to determine the standard achieved by a participant taking a physical fitness test.	✓	▶
5	Prime Number	Define a function isPrime(number) that takes in a number as argument and return True if the number is a prime number.	✓	▶
6	Health Risk Asessment	Write a function using 'if/elif/else' conditionals to compute the BMI of a person, and return the risk associated with cardiovascular diseases.	✓	▶
7	Is Triangle	Define a function that takes in 3 values and determine if they can form the sides of an triangle.	✓	▶
8	Discrimant of a quadratic equation	For a quadratic equation in the form of $ax^2 + bx + c$ , the discriminant, D is $b^2 - 4ac$ . Write a function that return the following output depending on the discriminant. D > 0: 2 real roots. D = 0: 1 real root. D < 0: 2 complex roots.	✓	▶
9	12hr to 24hr Time Conversion	Write a function that converts the time to 24hr format.	✓	▶
10	Leap Year	Write a function that determines if a given year is a leap year. A leap year is divisible by 4, but not by 100, unless it is also divisible by 400.	✓	▶
11	Pairwise comparison of DNA sequences.	Pairwise comparision of DNA sequences is a popular technique used in Bioinformatics. It usually involves some scoring scheme to express the degree of similarity. Write a function that compares two DNA sequences based on the following scoring scheme: +1 for a match, +3 for each consecutive match and -1 for each mismatch.	✓	▶
12	Risk Game	In the Risk board game, there is the situation where the attacker rolls 3 dice while the defender rolls 2 dice. To determine the outcome, the highest die of each player is compared, followed by the next highest die. For each case, the attacker's die has to be higher than that of the defender to win. The loser will lose 1 army in each case.	✓	▶
13	Tic-tac-toe	In the pencil-and-paper game, Tic-tac-toe, 2 players take turns to mark 'X' and 'O' on a board of 3x3 squares. The player who succeeds in marking 3 successive 'X' or 'O' in vertical, horizontal or diagonal stripe wins the game. Write a function that determines the outcome of a tic-tac-toe game.	✓	▶
14	Military to Regular Time Conversion	Write a function that converts the time from military to regular format.	✓	▶