

## Typescript. Task 1.

Create new Typescript project that includes package.json and tsconfig.json files. Tune “npm start” command to run project using lite-server and “npm run build” command to dynamically rebuild JS project files if TS files were changed.

Project has to contain several variables of different data types (according to the task option) and three functions that have input parameters and return values: common function, function variable and arrow function. Function, that has an array input parameter (or rest input) has to work with it using loop.

Demonstrate potential errors with wrong variable datatype and function parameter data type. Call function with optional/default parameter.

**Option 1.** Variable data types: number, string, array of strings. Common function: inputs – number, array, output string; function variable: no input, output – tuple(number, string); arrow function: input – rest number, output – enum value.

**Option 2.** Variable data types: boolean, string, tuple(number, string, string). Common function: inputs – number, string (optional), output boolean; function variable: inputs enum value, boolean (default), output – string; arrow function: input – string (default), string (optional), output – string.

**Option 3.** Variable data types: number, boolean, enum (three values). Common function: no input, output boolean; function variable: input rest number, output – tuple(boolean, boolean); arrow function: inputs –number, string (optional) output – enum value.

**Option 4.** Variable data types: number, string, tuple(number, number). Common function: input –array, no output; function variable: no input, output – boolean; arrow function: inputs – string, rest number (optional), no output.

**Option 5.** Variable data types: boolean, string, array of numbers. Common function: no input, no output; function variable: input string (default), output – tuple(number, number); arrow function: input – rest boolean, output – number.

**Option 6.** Variable data types: number, boolean, enum (five values). Common function: input – array of tuples(number, number), no output; function variable: input boolean, output – tuple(number, boolean); arrow function: no input, output – tuple(number, boolean).

**Option 7.** Variable data types: boolean, string, enum (four values). Common function: input –array(number), output array(string); function variable: inputs – tuple(number, number), string(default), no output; arrow function: input – rest number, no output.

**Option 8.** Variable data types: string, number, array of boolean. Common function: input – boolean, output boolean; function variable: string (optional), number (optional), no output; arrow function: input – string, number (default), no output.

**Option 9.** Variable data types: string, string, tuple(boolean, number). Common function: no input, output array(string); function variable: input – string, rest number, output – string; arrow function: input – rest boolean, no output.

**Option 10.** Variable data types: number, number, array of tuples (number, string). Common function: inputs – string, number, array (default), output string; function variable: input - boolean, output – tuple(boolean, number); arrow function: input –number (optional), output – enum value.