// Interface comum para produtos (computadores)

interface *Computer* {

    getRAM(): *number*;

    getHDD(): *number*;

    getCPU(): *number*;

    getType(): *string*;

    toString(): *string*;

  }

  // Implementação da classe ComputerFactory

  class ComputerFactory {

    static createComputer(*type*: *string*, *ram*: *number*, *hdd*: *number*, *cpu*: *number*): *Computer* | *null* {

      if (*type*.toLowerCase() === "pc") {

        return **new** PC(*ram*, *hdd*, *cpu*);

      } else if (*type*.toLowerCase() === "server") {

        return **new** Server(*ram*, *hdd*, *cpu*);

      }

      return null; // Retorna null se o tipo não for reconhecido

    }

  }

  // Implementação da classe PC

  class PC implements *Computer* {

    private ram: *number*;

    private hdd: *number*;

    private cpu: *number*;

    private type: *string* = "PC";

    constructor(*ram*: *number*, *hdd*: *number*, *cpu*: *number*) {

*this*.ram = *ram*;

*this*.hdd = *hdd*;

*this*.cpu = *cpu*;

    }

    getRAM(): *number* {

      return *this*.ram;

    }

    getHDD(): *number* {

      return *this*.hdd;

    }

    getCPU(): *number* {

      return *this*.cpu;

    }

    getType(): *string* {

      return *this*.type;

    }

    toString(): *string* {

      return `PC: RAM=${*this*.ram}GB, HDD=${*this*.hdd}GB, CPU=${*this*.cpu}GHz`;

    }

  }

  // Implementação da classe Server

  class Server implements *Computer* {

    private ram: *number*;

    private hdd: *number*;

    private cpu: *number*;

    private type: *string* = "Server";

    constructor(*ram*: *number*, *hdd*: *number*, *cpu*: *number*) {

*this*.ram = *ram*;

*this*.hdd = *hdd*;

*this*.cpu = *cpu*;

    }

    getRAM(): *number* {

      return *this*.ram;

    }

    getHDD(): *number* {

      return *this*.hdd;

    }

    getCPU(): *number* {

      return *this*.cpu;

    }

    getType(): *string* {

      return *this*.type;

    }

    toString(): *string* {

      return `Server: RAM=${*this*.ram}GB, HDD=${*this*.hdd}GB, CPU=${*this*.cpu}GHz`;

    }

  }

  // Exemplo de uso

  const pc = ComputerFactory.createComputer("pc", 8, 512, 3.4);

  const server = ComputerFactory.createComputer("server", 32, 1024, 2.2);

  if (pc && server) {

    console.log(pc.toString());

    console.log(server.toString());

  }