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| **Function Name** | **Description** | **Input Parameter** | **Return Data** |
| delay | This function computes for the milliseconds delay per clock tick. It is used for delaying the next argument. | milliseconds – length of delay in milliseconds per clock tick | none |
| computeDamage | This function computes for the damage the attacker Pokémon will deal to the defending Pokémon. It also computes for the compatibility of STAB damage. It takes the first and second type of the attacker Pokémon (as a string) and compares it to the type of move used (as a string) and outputs base power of the move and the final damage output is processed through a series of if-else statements and takes as parameter the first and second type of defending Pokémon (as a string) and the type of move the attacker Pokémon used (as a string). This function will return the total damage dealt to the defending Pokémon | moveType – the type of move  type1 – first type of defending Pokémon  type2 – second type of defending Pokémon  P1Type1 – first type of player 1 Pokémon  P1Type2 – second type of player 1 Pokémon  P2Type1 – first type of player 2 Pokémon  P2Type2 – second type of player 2 Pokémon  basePower – base power of the attacking Pokémon’s move  player – player turn | returns the computed damage the enemy Pokémon would receive |
| gamemenu | This function is used for the battle sequence. It is looped with a while statement taking as parameters the player 1 & player 2 Pokémon health. It displays the Battle Interface such as the name of the Pokémon (as a string) and their respective health, moves (as a string), power points and base power for moves. There are two separate if statements for the players in which the next turned is ticked by adding 1 to the player variable. The selection of move is looped by a do-while statement to avoid the player from choosing random numbers. The while statement will only end if any of the player’s Pokémon health reaches 0. The winner is announced at the end of the function depending on the outcome of the math. This function does not return any value. | P1Pokemon – player 1 Pokémon name  P2Pokemon – player 2 Pokémon name  P1health – remaining health of player 1 Pokémon  P2health – remaining health of player 2 Pokémon  P1maxHP – max health of player 1 Pokémon  P2maxHP – max health of player 2 Pokémon  P1Move1 – move name for player 1 Pokémon’s first move  P1Move2 – move name for player 1 Pokémon’s second move  P2Move1 – move name for player 2 Pokémon’s first move  P2Move2 – move name for player 1 Pokémon’s second move  P1Move1BP – player 1 Pokémon’s first move base power  P1Move2BP – player 1 Pokémon’s second move base power  P2Move1BP – player 2 Pokémon’s first move base power  P2Move2BP – player 2 Pokémon’s second move base power  P1Type1 – first type of player 1 Pokémon  P1Type2 – second type of player 1 Pokémon  P2Type1 – first type of player 2 Pokémon  P2Type2 – second type of player 2 Pokémon  P1Move1Type – player 1 Pokémon’s first move type  P1Move2Type – player 1 Pokémon’s second move type  P2Move1Type – player 2 Pokémon’s first move type  P2Move2Type – player 2 Pokémon’s second move type  P1Move1PP – player 1 Pokémon’s first move power points  P1Move2PP – player 1 Pokémon’s second move power points  P2Move1PP – player 2 Pokémon’s first move power points  P2Move2PP – player 2 Pokémon’s second move power points | none |
| main | This function is used to initialize and declare most of the variables. The Pokémon names, types, and moves are assigned using character pointers. The players select their Pokémon in this function as well and the corresponding chosen Pokémon will assign values to the pointers to be passed on to other functions. The selection of Pokémon is enclosed in a do-while statement to avoid the selection of garbage numbers. This function returns 0 | N/A | returns 0 |