```
function
        var
        INTEGER  diff = 0, intentos = 0, i = 0, j = 0, a_fila = 0, a_col = 0;
        endvar
        read diff
   //validar entre 1 y 3. Tambien los 3 intentos
        if diff > 3 OR diff < 1 then
        while intentos < 2 then
                write “Elige una opcion correcta!”;
                write “1. Fácil”;
                write “2. Medio”;
                write “3. Dificil”;
                read diff);
                intentos += 1;
        endwhile
        endif



   switch diff) {
   //no pide diferenciar entre dificultades asi que uso los case sin break
   case 1:
   case 2:
   case 3:
         if diff == 1 THEN
                WRITE “Has escogido la dificultad Fácil”;
         ENDIF
        else if diff == 2 THEN
                WRITE “Has escogido la dificultad Medio”;
        }
        else if diff == 3 THEN
                WRITE “Has escogido la dificultad Dificil”;
        }
//inicia el tablero en ceros
         for i = 0; TO <= ROWS; i++ do
                for  j = 0 to j <= COLS; j++ then
                        tablero[i][j] = 0;
                endfor
         endfor

//posicionando barcos segun la imagen de la practica
        for i = 0 to i <= ROWS; i++ do
                for j = 0 to  j <= COLS; j++ do
                        if tablero[i][j] == 0 then
                                tablero[1][8] = 1;
                                tablero[2][8] = 1;
                                tablero[3][8] = 1;
                                tablero[2][2] = 1;
```

```
                                    tablero[3][2] = 1;
                                    tablero[4][2] = 1;
                                    tablero[2][4] = 1;
                                    tablero[2][5] = 1;
                                    tablero[5][4] = 1;
                                    tablero[5][5] = 1;
                                    tablero[5][6] = 1;
                                    tablero[5][7] = 1;
                                    tablero[8][2] = 1;
                                    tablero[8][3] = 1;
                                    tablero[8][4] = 1;
                                    tablero[8][5] = 1;
                                    tablero[8][6] = 1;
                            endif
                    endfor
            endfor
//muestra el tablero en pantalla

            for i = 0 to i < ROWS  i++ do
                    white i
                    for j = 0 to j < COLS; j++ do
                            write "\t[ ]";
                    endfor
                    write “\n”;
            endfor

//donde vamos a atacar no he podido poner letras a las columnas
            do
                    write "Ingrese el numero de fila: ";
                    read a_fila);
            while a_fila < 0 OR a_fila > 10;

            do
                    write "Ingrese el numero de columna: ";
                    read a_col;

            while a_col < 0 OR a_col > 10;

//verificar si esta un barco en la casilla
            if tablero[a_fila][a_col] == 0) then
                    write "has fallado!\n");
                    tablero[a_fila][a_col] = 2;
            endif
            else if tablero[a_fila][a_col] == 1 then
                    write "has acertado!\n");
                    tablero[a_fila][a_col] = 2;
            endif
            else if tablero[a_fila][a_col] == 2 then
```

```
                write has fallado!\n";
                tablero[a_fila][a_col] = 2;
        endif
// mostrar el tablero * para los barcos la X donde disparaste

        for  i = 0 to i < ROWS; i++ do
                write i
                for j = 0 to j < COLS; j++ do
                        if tablero[i][j] == 1 then
                                write "\t[*]";
                        endif
                        else if tablero[i][j] == 2 then
                                printf("\t X");
                        endif
                        else if tablero[i][j] == 0 then
                                printf("\t[ ]");
                        endif
                endfor
                write "\n";
        endfor

        break;

   endswitch

endfunction
```