```
function
        contant
                INTEGER ROWS :=10;
                INTEGER COLS :=10;

        endconstant
        var
                INTEGER num, i:=1,sport[ROWS ][COLS ],x,y;
        endvar

        WRITE "*****************************************
               *****************************************
               ******THE BATTLESHIP GAME *******
               *****************************************
               *****************************************",
        WRITE "1.Easy";
        WRITE "2.Difficult";
        WRITE"3.Very Complicated";
        WRITE "0.I want to exit.";
        READ num;
        if  (num >3) then
                while (i < 3) do
                        WRITE "1.Easy";
                        WRITE "2.Difficult";
                        WRITE"3.Very Complicated";
                        WRITE "0.I want to exit.";
                        READ num;
                        i := i +1;
                endwhile
        endif
        switch (num)  do
                case 1 then
                        for i:=1 to ROWS  do
                                for i:=1 to COLS  do
                                        sport[i][j]=0;
                                endfor
                        endfor
                        WRITE "A B C D E F G H I J ";
                        for i:=1 to ROWS  do
                                WRITE "i";
                                for i:=1 to COLS  do
                                        WRITE "[ ]";
                                endfor
                        endfor
                        for i:=1 to ROWS  do
                                for i:=1 to COLS  do
                                        if sport[i][j] == 0 then
                                                sport[3][3]=1;
```

```
                              sport[4][3]=1;
                              sport[5][3]=1;
                              sport[3][5]=1;
                              sport[3][6]=1;
                              sport[2][9]=1;
                              sport[3][9]=1;
                              sport[4][9]=1;
                              sport[6][5]=1;
                              sport[6][6]=1;
                              sport[6][7]=1;
                              sport[6][8]=1;
                              sport[9][3]=1;
                              sport[9][4]=1;
                              sport[9][5]=1;
                              sport[9][6]=1;
                              sport[9][7]=1;


                    endif
            endfor
    endfor
    do
            WRITE "Enter the ROW from 1 to 10 : ";
            READ i;
    while i < 1 || i > 10 ;
    do
            WRITE "Enter the COLUMN from 1 to 10 : ";
            READ j;
    while j < 1 || j > 10 ;
    if  sport[i][j] == 0 then
            WRITE "Sorry you miss the ship;
            WRITE "A B C D E F G H I J ";
            for i:=1 to ROWS  do
                    WRITE "i";
                    for i:=1 to COLS  do
                            WRITE "[ ]";
                    endfor
            endfor
    else if  sport[i][j]==1 then
            WRITE "You hit  the ship;
            Sport[i][j] =2 ;
            WRITE "A B C D E F G H I J ";
            for x:=1 to ROWS  do
                    WRITE "x";
                    for y:=1 to COLS  do
                            if sport[x][y]== 2 then
                                    WRITE " [*]");
                            else  then
```

```
                                    WRITE "[ ]");
                        endif

                endfor
        endfor

break;
case 2 then
        for i:=1 to ROWS  do
                for i:=1 to COLS  do
                        sport[i][j]=0;
                endfor
        endfor
        WRITE "A B C D E F G H I J ";
        for i:=1 to ROWS  do
                WRITE "i";
                for i:=1 to COLS  do
                        WRITE "[ ]";
                endfor
        endfor
        for i:=1 to ROWS  do
                for i:=1 to COLS  do
                        if sport[i][j] == 0 then
                                sport[3][3]=1;
                                 sport[4][3]=1;
                                 sport[5][3]=1;
                                 sport[3][5]=1;
                                 sport[3][6]=1;
                                 sport[2][9]=1;
                                 sport[3][9]=1;
                                 sport[4][9]=1;
                                 sport[6][5]=1;
                                 sport[6][6]=1;
                                 sport[6][7]=1;
                                 sport[6][8]=1;
                                 sport[9][3]=1;
                                 sport[9][4]=1;
                                 sport[9][5]=1;
                                 sport[9][6]=1;
                                 sport[9][7]=1;


                        endif
                endfor
        endfor
        do
                WRITE "Enter the ROW from 1 to 10 : ";
                READ i;
```

```
                while i < 1 || i > 10 ;
                do
                        WRITE "Enter the COLUMN from 1 to 10 : ";
                        READ j;
                while j < 1 || j > 10 ;
                if  sport[i][j] == 0 then
                        WRITE "Sorry you miss the ship;
                        WRITE "A B C D E F G H I J ";
                        for i:=1 to ROWS  do
                                WRITE "i";
                                for i:=1 to COLS  do
                                        WRITE "[ ]";
                                endfor
                        endfor
                else if  sport[i][j]==1 then
                        WRITE "You hit  the ship;
                        Sport[i][j] =2 ;
                        WRITE "A B C D E F G H I J ";
                        for x:=1 to ROWS  do
                                WRITE "x";
                                for y:=1 to COLS  do
                                        if sport[x][y]== 2 then
                                                WRITE " [*]");
                                        else  then
                                                WRITE "[ ]");
                                        endif

                                endfor
                        endfor

break;

case 3 then
        for i:=1 to ROWS  do
                for i:=1 to COLS  do
                        sport[i][j]=0;
                endfor
        endfor
        WRITE "A B C D E F G H I J ";
        for i:=1 to ROWS  do
                WRITE "i";
                for i:=1 to COLS  do
                        WRITE "[ ]";
                endfor
        endfor
        for i:=1 to ROWS  do
                for i:=1 to COLS  do
                        if sport[i][j] == 0 then
```

```
                         sport[3][3]=1;
                           sport[4][3]=1;
                           sport[5][3]=1;
                           sport[3][5]=1;
                           sport[3][6]=1;
                           sport[2][9]=1;
                           sport[3][9]=1;
                           sport[4][9]=1;
                           sport[6][5]=1;
                           sport[6][6]=1;
                           sport[6][7]=1;
                           sport[6][8]=1;
                           sport[9][3]=1;
                           sport[9][4]=1;
                           sport[9][5]=1;
                           sport[9][6]=1;
                           sport[9][7]=1;


              endif
        endfor
endfor
do
        WRITE "Enter the ROW from 1 to 10 : ";
        READ i;
while i < 1 || i > 10 ;
do
        WRITE "Enter the COLUMN from 1 to 10 : ";
        READ j;
while j < 1 || j > 10 ;
if  sport[i][j] == 0 then
        WRITE "Sorry you miss the ship;
        WRITE "A B C D E F G H I J ";
        for i:=1 to ROWS  do
                WRITE "i";
                for i:=1 to COLS  do
                        WRITE "[ ]";
                endfor
        endfor
else if  sport[i][j]==1 then
        WRITE "You hit  the ship;
        Sport[i][j] =2 ;
        WRITE "A B C D E F G H I J ";
        for x:=1 to ROWS  do
                WRITE "x";
                for y:=1 to COLS  do
                        if sport[x][y]== 2 then
                                WRITE " [*]");
```

```
                                    else  then
                                        WRITE "[ ]");
                                    endif

                        endfor
                    endfor

            break;

            case 0 then
                    WRITE " you left the game ";

        endswitch

endfunction
```