## Battleship

```
#include <stdio.h>
#define ROWS 10
#define COLS 10
void main(){
  int num , i=1,sport[ROWS][COLS],j,x,y;
  printf("************************\n");
  printf("******THE\ BATTTLESHIP\ GAME********n");
  printf("************************\n");
  printf("************************\n");
  printf("Elige el Nivel\n");
  printf("1.Facil\n");
  printf("2.Dificil\n");
  printf("3.Muy Dificil\n");
  printf("0.Salir.\n");
  scanf("%d",&num);
 if( num > 3){
     while (i < 3){
       printf("1.Facl\n");
       printf("2.Dificil\n");
       printf("3.Muy Dificil\n");
       printf("0.Salir.\n");
       scanf("%d",&num);
       i += 1;
     }
  }
  switch(num){
     case 1:
       for(i=1;i \le ROWS;i++){
                    for(j=1;j\leq=COLS;j++){
                          sport[i][j]=0;
                     }
       // La tabla
       printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
       for(i=1;i \le ROWS;i++){
          printf("%d",i);
                    for(j=1;j\leq=COLS;j++){
                       printf("\t[ ]");
                    printf("\n");
       }
```

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// Posicion barco
for(i=1;i \le ROWS;i++){
             for(j=1;j\leq=COLS;j++){
                if (sport[i][j]== 0 ){
                   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;
                }
             }
}
// Preguntar al usuario un numero del 1 al 10 para hundir un barco
   printf("Entra una fila del 1 al 10 :");
   scanf("%d",&i);
while(i < 1 || i > 10);
do {
   printf("Entra una fila del 1 al 10 :");
   scanf("%d",&j);
while(j < 1 || j > 10);
// Si el usuario falla enseñar el tablero donde ha fallado
if (sport[i][j]==0){
   printf("No has hundido ningun barco\n");
   printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
   for(i=1;i \le ROWS;i++){
     printf("%d",i);
                for(j=1;j\leq=COLS;j++){
                   printf("\t[ ]");
                printf("\n");
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}
  //Si el usuario ha hunddo un barco en señar el tablero
  }else if (sport[i][j]==1) {
     printf("Has hundido un barco y has ganado! \n)");
     sport[i][j]=2;
     printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
     for(x=1;x\leq=ROWS;x++){
        printf("%d",x);
                   for(y=1;y\leq=COLS;y++){
                      if (sport[x][y]== 2){
                        printf("\t[*]");
                     }else {
                        printf("\t[ ]");
                     }
                   printf("\n");
     }
  }
  break;
case 2:
  for(i=1;i \le ROWS;i++){
                for(j=1;j\leq=COLS;j++){
                      sport[i][j]=0;
                 }
  printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
  for(i=1;i \le ROWS;i++){
     printf("%d",i);
                for(j=1;j\leq=COLS;j++){
                   printf("\t[ ]");
                }
                printf("\n");
  }
  for(i=1;i \le ROWS;i++){
                for(j=1;j\leq=COLS;j++){
                   if (sport[i][j]== 0 ){
                      sport[3][3]=1;
                      sport[4][3]=1;
                      sport[5][3]=1;
```

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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;
                }
             }
}
do {
   printf("Entra una fila del 1 al 10 :");
   scanf("%d",&i);
while(i < 1 || i > 10);
do {
   printf("Entra una columna del 1 al 10 :");
   scanf("%d",&j);
while(j < 1 || j > 10);
if (sport[i][j]==0){
   printf("No has hundido ningun barco\n");
   printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
   for(i=1;i \le ROWS;i++){
     printf("%d",i);
                for(j=1;j\leq=COLS;j++){
                   printf("\t[ ]");
                printf("\n");
}else if (sport[i][j]==1) {
   printf("Has hundido un barco y has ganado! \n)");
   sport[i][j]=2;
   printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
   for(x=1;x\leq=ROWS;x++){
     printf("%d",x);
                for(y=1;y\leq COLS;y++){
```

```
if (\operatorname{sport}[x][y] == 2){
                         printf("\t[*]");
                      }else {
                         printf("\t[ ]");
                      }
                   printf("\n");
     }
  }
  break;
case 3:
  for(i=1;i \le ROWS;i++){
                for(j=1;j\leq COLS;j++){
                      sport[i][j]=0;
                 }
  printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
  for(i=1;i\leq=ROWS;i++){
     printf("%d",i);
                for(j=1;j<=COLS;j++){
                   printf("\t[ ]");
                }
                printf("\n");
  }
  for(i=1;i \le ROWS;i++){
                for(j=1;j\leq=COLS;j++){
                   if (sport[i][j]== 0 ){
                      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;
                }
              }
}
do {
   printf("Entra una fila del 1 al 10 :");
   scanf("%d",&i);
while(i < 1 || i > 10);
do {
   printf("Entra una columna del 1 al 10 :");
   scanf("%d",&j);
while(j < 1 || j > 10);
if (sport[i][j]==0){
   printf("No has hundido ningu barco\n");
   printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
   for(i=1;i \le ROWS;i++){
      printf("%d",i);
                 for(j=1;j\leq=COLS;j++){
                    printf("\t[ ]");
                 printf("\n");
}else if (sport[i][j]==1) {
   printf("Has hundido un barco y has ganado! \n)");
   sport[i][j]=2;
   printf("\tA\tB\tC\tD\tE\tF\tG\tH\tI\tJ\n");
   for(x=1;x\leq=ROWS;x++){
      printf("%d",x);
                 for(y=1;y\leq=COLS;y++){}
                    if (\operatorname{sport}[x][y] == 2){
                      printf("\t[*]");
                   }else {
                      printf("\t[ ]");
                    }
                 printf("\n");
  }
}
```

```
break;
case 0 :
    printf("Has salido del juego");
}
```