

1 最初

乱数で、石をどこに置くかを決めます。

1.1 最初のプログラム

```
/*
   ci2.c
   最初の着手
*/
#include <stdio.h>
#include <stdlib.h>
#include <time.h>

#define B_SIZE 9
#define WIDTH 11 // B_SIZE + 2
#define BOARD_MAX 81

int get_z(int x, int y);

int board[121] = {
    3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
    3, 0, 0, 0, 0, 0, 0, 0, 0, 0, 3,
};

int main()
{
    int r;
    int x,y;
```

```

char *str[3] = {"·", "●", "○"};

srand((unsigned)time(NULL));
r = rand() % 121;
while(r == 0 || r <= 11 || r > 109 || r % 11 == 0 || r % 11 == 10){
    r = rand() % 121;
}
board[r] = 1;

printf("      \n ");
for(x = 0; x < B_SIZE; x++){
    printf("%d ", x+1);
}
printf("\n");

for(y = 0; y < B_SIZE; y++){
    printf("%d ", y+1);
    for(x = 0; x < B_SIZE; x++){
        printf("%s", str[board[get_z(x,y)]]);
    }
    printf("\n");
}

return 0;
}

int get_z(int x, int y)
{
    return (y + 1) * WIDTH + (x + 1); //0<= x <= 8, 0<= y <= 8
}

```