```c
/*###########################################################################*/
/*HW03_HASAN_MEN_131044009_part1.c                                           */
/*_____                                                   */
/*Written by Hasan MEN on March 9, 2015                                      */
/*                                                                           */
/*Description:                                                               */
/*_____                                                                */
/*   - this is a guess game. It produce a random number and ask player       */
/* to find this. İf user find, it will return how many times and ask         */
/*  play another games with new random number                                */
/*INPUT:                                                                     */
/*_____                                                                     */
/*   -want = choice play or not                                              */
/*   -guess =                                                                 */
/*OUTPUT:                                                                    */
/*_____                                                                    */
/*   approaches infos                                                        */
/*   counter = found in count of chance                                      */
/*###########################################################################*/
#include <stdio.h>
#include <stdlib.h>

/*function prototypes*/
int RNG();
int CalculateTheDifference(int num1,int num2);
void WarnThePlayer(int number,int guess);

int main()
{
    /*START_OF_MAIN*/
    int number;
    int guess;
    char want;
    int counter=0;  /* keep the number of trials */
    int repeater=1; /*to use conditional loop*/
    /* END_OF_VARIABLES*/


    number = RNG();     /* assign a random number to variable number */

    printf("Wanna play a game ? (E)xit / (P)lay ");
    scanf(" %c",&want);

/* loop will return until press (e,E) */
    while(repeater==1)
    {

        switch(want)
        {
        case 'e':
        case 'E':
            {
            printf("Good Bye...\n");
            repeater++; /* if press e,E finish the loop */
            }
            break;
        case 'p':
        case 'P':
            {
                ++counter; /* count how many times try  */
                printf("Press your %d (st/nd/rd/th) guess >",counter);
                scanf("%d",&guess);

                if(number==guess)
                {
                    printf("Congrats...\nYou find in %d time(s)\n\n",counter);
                    printf("Wanna play another game (E)xit / (P)lay = ");
                    scanf(" %c",&want);

                    /* start a new game and reset the random number */
                    number = RNG();
                    counter=0; /* reset  counter */
                }
                else
```

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 75                         {
 76                             /* if number not equal to guess return warnings */
 77                             WarnThePlayer(number,guess);
 78                         }
 79                     }
 80                     break;
 81             default:
 82                     {
 83                         /* incorrect character */
 84                         printf("Override option\n");
 85                         repeater++;
 86                     }
 87             }
 88         }
 89     return 0;
 90     /*END_OF_MAIN*/
 91 }
 92
 93 /*###################################################################*/
 94 /* This function create a random number with using rand()           */
 95 /*  function and return to number variable                          */
 96 /*###################################################################*/
 97 int RNG()
 98 {
 99     srand(time(NULL));
100     return (1+rand()%10);   /* 1<=x<=10 */
101 }
102
103
104 /*###################################################################*/
105 /* Calculate difference between numbers to help user if can not     */
106 /* find first change                                                */
107 /*-- find big and small number after that remove them               */
108 /*###################################################################*/
109 int CalculateTheDifference(int num1,int num2)
110 {
111
112     int temp;   /* use temp vary. to change number order */
113
114     if(num1<num2)
115     {
116         temp=num1;
117         num1=num2;
118         num2=temp;
119     }
120
121     return num1-num2;   /* big number - small number */
122 }
123
124 /*###################################################################*/
125 /* This function warn the player about his guess number             */
126 /* takes number and guess parameter                                 */
127 /* call CalculateTheDifference function and check some inf.          */
128 /* if thats true writes on screen or write warnings                 */
129 /*###################################################################*/
130 void WarnThePlayer(int number,int guess)
131 {
132     /* show the user which number is bigger */
133     if(number>guess)
134         printf("Your Guess < Random - ");
135     else if (number<guess)
136         printf("Your Guess > Random - ");
137
138     /* find difference and show little advice */
139     if (CalculateTheDifference(number,guess)>=5)
140             printf("You are too far from the number\n\n");
141     else if (CalculateTheDifference(number,guess)>=3)
142             printf("You are far from the number\n\n");
143     else if (CalculateTheDifference(number,guess)<=2)
144             printf("You are close to the number\n\n");
145 }
146 /*###################################################################*/
147 /*              END_OF_HW03_HASAN_MEN_131044009_part1.c              */
148 /*###################################################################*/
```