C Programming

13016235

Project: Blackjack Let’s get rich

Name: Chanyanuch Likitpanjamanon

ID: 61090004

```
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
#include <ctype.h>
#include <stdlib.h>
#include <string.h>
#include <time.h>
#include <stdbool.h>
#include <dos.h>

#define SUIT 13
#define CARDS 52

static int win = 0;

struct Player
{
	char name[100];
	int money;
	int Win;
	int point;
	int point2;
	char cardPlayer[CARDS][2];
	char cardPlayer2[CARDS][2];
};
struct Dealer
{
	char cardDealer[CARDS][2];
	int point;
};

int displayFile(char *filename)
{
	FILE *inFile;
	char a;
	inFile = fopen(filename, "r");
	if (inFile == NULL)
	{
```

```
		return 0;
	}
	while (fscanf(inFile, "%c", &a) != EOF)
	{
		printf("%c", a);
	}
	fclose(inFile);
	return 1;
}
int updateFile(char name1[50] , int winF , int moneyF , struct Player player)
{
	FILE *fp, *fp1;
	int res, f = 0;
	fp = fopen("userData.txt", "r");
	fp1 = fopen("temp.txt", "a");

	while (fscanf(fp, "%s %d %d", name1, &winF, &moneyF) != EOF)
	{
		res = strcmp(player.name, name1);
		if (res == 0)
		{
			f = 1;
			fprintf(fp1, "%s %d %d\n", name1, player.Win, player.money);
		}
		else
		{
			fprintf(fp1, "%s %d %d\n", name1, winF, moneyF);
		}
	}
	if (f == 0)
	{
		printf("Name not found");
	}
	fclose(fp);
	fclose(fp1);

	fp = fopen("userData.txt", "w");
```

```
	fclose(fp);
	fp = fopen("userData.txt", "a");
	fp1 = fopen("temp.txt", "r");
	while (fscanf(fp1, "%s %d %d\n", name1, &winF, &moneyF) != EOF)
	{
		fprintf(fp, "%s %d %d\n", name1, winF, moneyF);
	}
	fclose(fp);
	fclose(fp1);
	fp = fopen("temp.txt", "w");
	fclose(fp);
}
int writeFile(char *name,int count,int credit)
{
	FILE *outFile;
	char filename2[1000] = "userData.txt";

	outFile = fopen(filename2, "a");
	if (outFile != NULL)
	{
		fprintf(outFile, "%s ", name);
		fprintf(outFile, "%d ", count);
		fprintf(outFile, "%d ", credit);
		fprintf(outFile, "\n");
	}
	fclose(outFile);
	return 1;
}

int chkPoint(char card[][2], int maxDraw, int Pointt)
{
	int c = maxDraw , APoint=0;
	if (card[c][0] == 'A' )
	{
		if ((Pointt + 11 )> 21)
		{
			return 1;
```

```
                }
                else
                {
                        return 11;
                }
        }
        else if (card[c][0] == 'J' || card[c][0] == 'Q' || card[c][0] == 'K' || card[c][0] == '1')
        {
                return 10;
        }
        else
        {
                return atoi(&card[c][0]);
        }
}
int drawCard(int i, char deck[CARDS][2], char deckSuit[CARDS][1])
{
        int randN = 0;
        int randS = 0;
        int ckCard = 0;
        char randNumber[13][2] = { "A","2","3","4","5","6","7","8","9","10","J","Q","K" };
        char randSuit[4][1] = { "C","D","H","S" };
        randN = (int)rand() % 12;
        randS = (int)rand() % 3;
        while (ckCard <= i)
        {
                if (randNumber[randN][0] == deck[ckCard][0] && randSuit[randS][1] == deckSuit[ckCard][1])
                {
                        randN = (int)rand() % 12;
                        randS = (int)rand() % 3;
                        ckCard = 0;

                }
                else if (randNumber[randN][0] != deck[ckCard][0] && randSuit[randS][1] !=
deckSuit[ckCard][1] && ckCard == i)
                {
                        deck[i][0] = randNumber[randN][0];
```

```
                        deckSuit[i][1] = randSuit[randS][1];
                        return randN;
                }
                else
                {
                        ckCard++;
                }
        }
}
int betting(int money)//betting
{
        char bet[1000];
        int b = 0;
        bool check;
        do
        {
                check = true;
                printf("Enter an amount you would like to bet : ");
                gets(bet);
                for (int i = 0; i < strlen(bet); i++)
                {
                        if (!isdigit(bet[i])) {
                                check = false;
                                break;
                        }
                }
                b = atoi(bet);
                if (b > money)
                {
                        printf("your money is not enough.\n");
                }
                else if (b == 0 )
                {
                        printf("you have to bet more.\n");
                }
        } while ((b > money || b == 0) || check == false) ;
        return b;
```

```
}
int checkAce(struct Dealer dealer ,struct Player player , int money)
{
	char select[5];
	if (dealer.cardDealer[0][0] == 'A' &&  player.money > money)
	{
		do
		{
			printf("Do you want to insurance ? (Enter 'y' or 'n') : ");
			gets(select);
			if (strcmp(select, "y") == 0 || strcmp(select,"Y") == 0)
			{
				player.money += money/2;
				printf("Amount of money left: %d credits. \n", player.money);
				return player.money;
			}
			else if(strcmp(select, "n") == 0 || strcmp(select, "N")==0)
			{
				return player.money;
			}
		} while (strcmp(select, "y") != 0 && strcmp(select, "n") != 0 && strcmp(select,"Y") != 0
&&strcmp(select,"N")!= 0);
	}
}

int ranCardDealer(char DealerCard[][2], int count, int PointD, char deck[CARDS][2], char deckSuit[CARDS][1])
{
	int ten = 0;
	while (PointD < 17)
	{
		ten = drawCard(count, deck, deckSuit);
		DealerCard[count][0] = deck[count][0];
		if (ten == 9)
		{
			printf("Dealer Card 10%c\n", deckSuit[count][1]);
		}
		else
```

```
                {
                        printf("Dealer Card %c%c\n", DealerCard[count][0], deckSuit[count][1]);
                }
                PointD += chkPoint(DealerCard, count,PointD);
        }
        return PointD;
}
int play(struct Player player, struct Dealer dealer,int money)
{
        int i = 0, draw = 0, pts = 0, ptsD = 0, plus = 0, m = 0, pts2 = 0, sp = 0, ten = 0, ckv = 0;
        char deck[CARDS][2];
        char deckSuit[CARDS][1];
        char ckbuf, choice[15],c[15];
        int ckSpilt, card3 = 0 , card4=0;
        srand(time(NULL));
        for (draw = 0; draw < 4; draw++) //draw player's cards
        {
                ten = drawCard(i, deck, deckSuit);
                if (draw == 0 || draw == 1 )
                {
                        dealer.cardDealer[draw][0] = deck[i][0]; //draw dealer's card
                        if (draw == 0)
                        {
                                if (ten == 9)
                                {
                                        printf("Dealer Card 10%c\n", deckSuit[draw][1]);
                                }
                                else
                                {
                                        printf("Dealer Card %c%c\n", dealer.cardDealer[draw][0],
deckSuit[draw][1]);
                                }
                                printf("Dealer's points: %d\n\n", chkPoint(dealer.cardDealer,
0,dealer.point));
                           }
                        ptsD += chkPoint(dealer.cardDealer, draw,dealer.point);
                }
```

```
                else
                {
                        player.cardPlayer[draw][0] = deck[i][0];
                        if (ten == 9)
                        {
                                printf("Player Card 10%c\n",deckSuit[draw][1]);
                        }
                        else
                        {
                                printf("Player Card %c%c\n", player.cardPlayer[draw][0],
deckSuit[draw][1]);
                        }
                        pts += chkPoint(player.cardPlayer, draw, player.point);                 //check the
value and add it to player's points
                        player.point = pts;
                }
                i++;
        }
        printf("Player's points %d \n", player.point);
        m = checkAce (dealer,player,money);
        if (m != 1)
        {
                player.money = m;
        }
        dealer.point = ptsD;
        if (player.point == 21)
        {
                printf("Congrats! You got a blackjack !!\n");
                win++;
                player.money += money * 2.5;
                ckbuf = getchar();
                return player.money;
        }
        else if (player.point < 21)
        {
                do
                {
```

```
                if (ckv == 0)
                {
                        ckbuf = getchar();
                }
        printf("\nType 'hit' to be dealt another card. Type 'stand' to hold. Type 'double' to draw one card and bet more credit. : ");
                gets(tolower(choice));
                if (strcmp(choice, "hit") == 0 || strcmp(choice,"Hit") == 0 )
                {
                        ten = drawCard(i, deck, deckSuit);
                        player.cardPlayer[i][0] = deck[i][0];
                        if (ten == 9)
                        {
                        printf("Player Card 10%c\n", deckSuit[i][1]);
                        }
                        else
                        {
                        printf("Player Card %c%c\n", player.cardPlayer[i][0], deckSuit[i][1]);
                        }
                        pts += chkPoint(player.cardPlayer, i, player.point);
                        player.point = pts;
                        printf("Player Points %d \n", player.point);
                        if (player.point == 21)
                        {
                                printf("Congrats! You got 21!\n");
                                win++;
                                return player.money += money * 2;
                        }
                        else if (player.point > 21)
                        {
                                printf("You bust\n");
                                printf("You lose\n");
                                return player.money;
                        }
                        i++;
                }
                else if (strcmp(choice, "double") == 0 || strcmp(choice,"Double") == 0)
```

```
{
        if (player.money > money)
        {
                ten = drawCard(i, deck, deckSuit);
                player.cardPlayer[i][0] = deck[i][0];
                if (ten == 9)
                {
                printf("Player Card 10%c\n", deckSuit[i][1]);
                }
                else
                {
        printf("Player Card %c%c\n", player.cardPlayer[i][0], deckSuit[i][1]);
                }
                pts += chkPoint(player.cardPlayer, i, player.point);
                player.point = pts;
                printf("Player Points %d \n", player.point);
                if (player.point == 21)
                {
                        printf("Congrats! You got 21!\n");
                        win++;
                        return player.money += money * 2;
                }
                else if (player.point > 21)
                {
                        printf("You bust\n");
                        printf("You lose\n");
                        return player.money;
                }
                player.money -= money;
                break;
        }
        else
        {
                printf("You can't doubledown\n");
        }
}
else if (strcmp(choice, "stand") == 0 || strcmp(choice,"Stand") == 0 )
```

```
                {
                        break;
                }
                ckv++;
        }
        while (strcmp(choice, "stand") != 0 && (choice != '\n' && choice != EOF));

        if (dealer.point < 17)
        {
        dealer.point = ranCardDealer(dealer.cardDealer, i, dealer.point,deck,deckSuit);
        }
        printf("Dealer Points %d \n", dealer.point );
        if (player.point < dealer.point && dealer.point <= 21)
        {
                printf("You lose\n");
                return player.money;
        }
        else if (player.point == dealer.point)
        {
                printf("You tie\n");
                return player.money += money;
        }
        else if(player.point > dealer.point && player.point <=21 || dealer.point >21)
        {
                printf("You Win!\n");
                win++;
                return player.money += money*2;
        }
    }
}
int main()
{
    struct Player player;
    struct Dealer dealer;
    FILE *fp,*fp1;
    char name[50],name1[50];
    int money = 0 ,count =0, selectt = 0 , moneyF=0 , winF = 0 ;
```

```
char again[10], ckBuf, repeat[10] ;
int select, select2;
char draw, ckbuf;
char filename[1000] = "rule.txt";
printf(">>>> Welcome to BlackJack Let's get rich!.<<<<\n");
do
{
	printf("Please Select the choice:\n");
	printf("Press 1.New Game\n	2.Load Game\n	3.Quit\n");
	scanf("%d", &select);
	ckBuf = getchar();
	if (select == 1)
	{
		printf("Enter your name: ");
		gets(player.name);
		fp = fopen("userData.txt", "r");
		if (fp == NULL)
		{
			printf("Error opening file\n");
			exit(1);
		}
		while (fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF)
		{
			if (strcmp(player.name, name) == 0)
			{
				break;
			}
			else
			{
				continue;
			}
		}
		if (strcmp(player.name, name) == 0)
		{
			do
			{
				printf("this name is Exist!\n");
```

```
                        printf("1. Load Game     2.Enter new name\n");
                        scanf("%d", &select2);
                        ckBuf = getchar();
                        if (select2 == 1)
                        {
                                player.money = moneyF;
                                player.Win = winF;
                                selectt = 1;
                                break;
                        }
                        else
                        {
                                printf("Enter your name: ");
                                gets(player.name);
                                displayFile(filename);
                                player.money = 500;
                                selectt = 0;
                                break;
                        }
                } while (select2 != 1 || select2 !=2);
                break;
        }
        else if (strcmp(player.name, name) != 0  )
        {
                displayFile(filename);
                player.money = 500;
                selectt = 0;
                break;
        }
}
else if (select ==  2)
{
                printf("Enter your name: ");
                gets(player.name);
                fp = fopen("userData.txt", "r");
                if (fp == NULL)
                {
```

```
                        printf("Error opening file\n");
                        exit(1);
                }
                while (fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF)
                {
                        if (strcmp(player.name, name) == 0)
                        {
                                break;
                        }
                        else
                        {
                                continue;
                        }
                }
                if (strcmp(player.name, name) == 0)
                {
                        player.money = moneyF;
                        player.Win = winF;
                        selectt = 1;
                }
                else
                {
                        player.money = 500;
                        selectt = 0;
                }
                break;
        }
        else if(select == 3)
        {
                exit(0);
        }
        else
        {
                printf("Invalid number\n");
        }
} while (select != 1 || select != 2);
do
```

```
{
	dealer.point = 0;
	player.point = 0;
	if (count != 0)
	{
		do
		{
			if (player.money > money)
			{
				printf("Press y/n to repeat bet: ");
				gets(repeat);
				if ((strcmp(repeat, "Y") == 0 || strcmp(repeat, "y") == 0) )
				{
					system("cls");
					player.money -= money;//betting
					break;
				}
				else if (strcmp(repeat, "N") == 0 || strcmp(repeat, "n") == 0)
				{
					money = betting(player.money);
					player.money -= money;//betting
					break;
				}
			}
			else
			{
				money = betting(player.money);
				player.money -= money;//betting
				break;
			}
		} while (strcmp(repeat, "Y") != 0 && strcmp(repeat, "y") != 0 && strcmp(repeat, "N")
!= 0 && strcmp(repeat, "n") != 0);
	}
	else
	{
		money = betting(player.money);
		player.money -= money;//betting
```

```
		}
		if (money < player.money)
		{
			printf("Amount of money left: %d credits. \nGood luck!\n", player.money);
		}
		printf("\n");
		player.money = play(player, dealer, money);
		count++;
		do
		{
			printf("Press Y/N to play again : ");
			gets(again);
		} while (strcmp(again, "Y") != 0 && strcmp(again, "N") != 0 && strcmp(again, "y") != 0 &&
strcmp(again, "n") != 0);

	} while (strcmp(again,"Y")==0  || strcmp(again, "y") == 0 || player.money <= 0 );

	player.Win = win;
	if (selectt == 0)
	{
		writeFile(player.name, player.Win, player.money);
	}
	else if (selectt == 1)
	{
		updateFile(name1,winF,moneyF,player);
	}
	system("pause");
}
```

13016235: C Programming

First Semester, 2018

Project Proposal

1. Project developer

Student ID	Name
61090004	Chanyanuch Likitpanjamanon

2. Project title

Blackjack : Let’s get rich

3. Project description and requirements

Project description:

The concept of this project is like the Blackjack or twenty-one card games. The objective of this game is that the player has to beat the dealer in one of the following ways:

- Get 21 points on the player's first two cards without a dealer get 21 points
- Reach a final score higher than the dealer without exceeding 21
- Let the dealer draw additional cards until their hand exceeds 21

The value of cards two through ten is their value (2 through 10). Jack, Queen, and King are all worth ten. Aces are worth one or eleven.

At the beginning of the game, the player and the dealer will get two cards randomly and the player will receive 1000 credits. After receiving an initial two cards, the player has seven standard options: "hit", "stand", "double down", "split", “surrender”, ”repeat” and “insurance”.

- **Hit:** Draw one card from the deck
- **Repeat:** Repeat the bet
- **Stand:** Take no more cards
- **Double down:** The player is allowed to increase the initial bet by up to 100% and the player can draw only one card
- **Split**: If the first two cards of a hand have the same value, the player can split them into two hands
- **Surrender**: (only available as first decision of a hand): When the player surrenders, the house takes half the player's bet and returns the other half to the player.

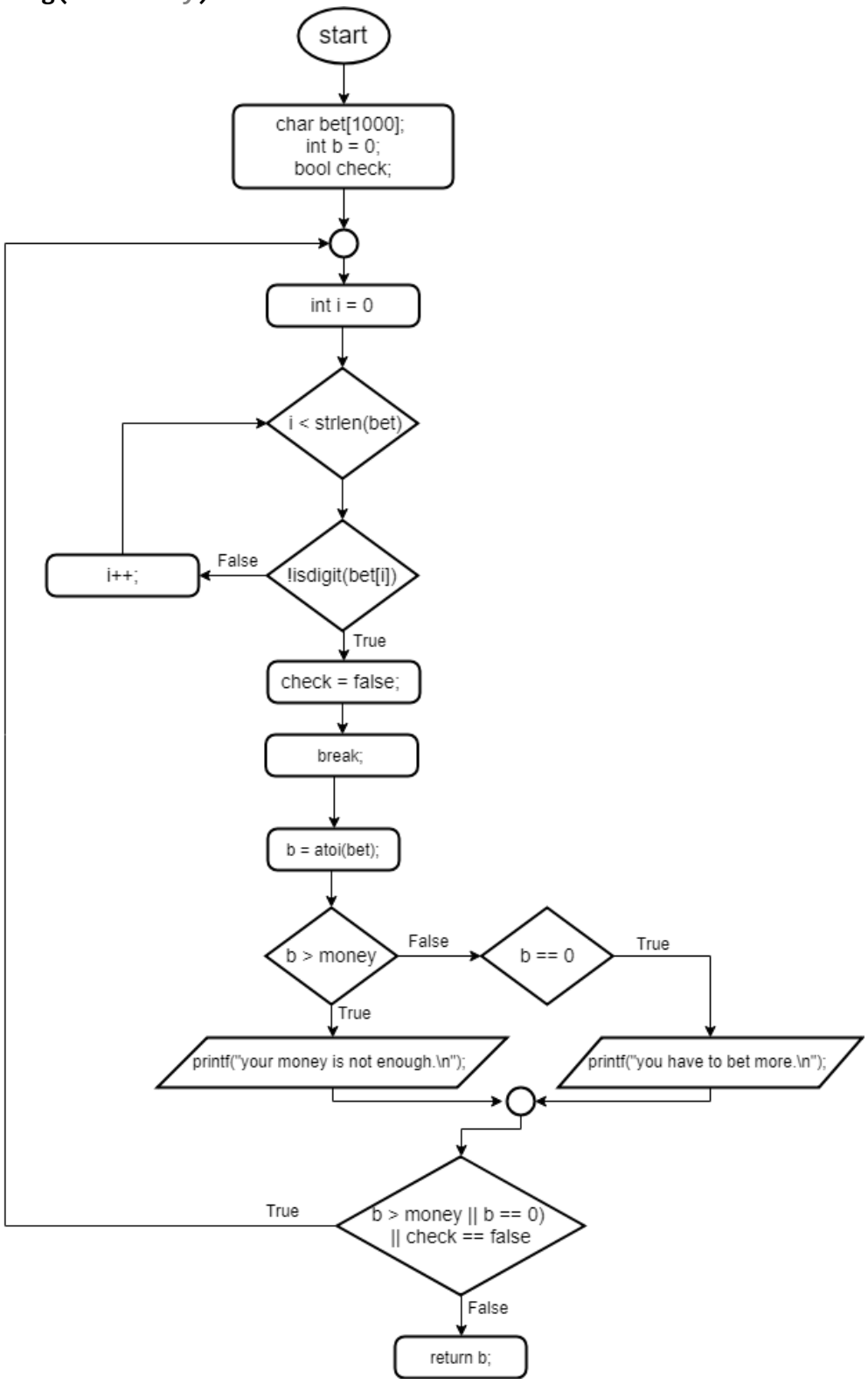
- **Insurance**: Insurance: If the dealer's up card is an ace, the player is offered the option of taking "insurance" before the dealer checks the hole card. If the player wants to use insurance, the player has to pay half of the credits that the player bets. If the dealer gets Blackjack, the player will gain the insurance money. However, if the dealer loses the game, player will get all insurance money and the dealer's money.

If the player runs out of credits, the game will be over. The player can then restart and play again. When the game is over the console will show the biggest win that the player gains from the dealer and the total amount of wins.

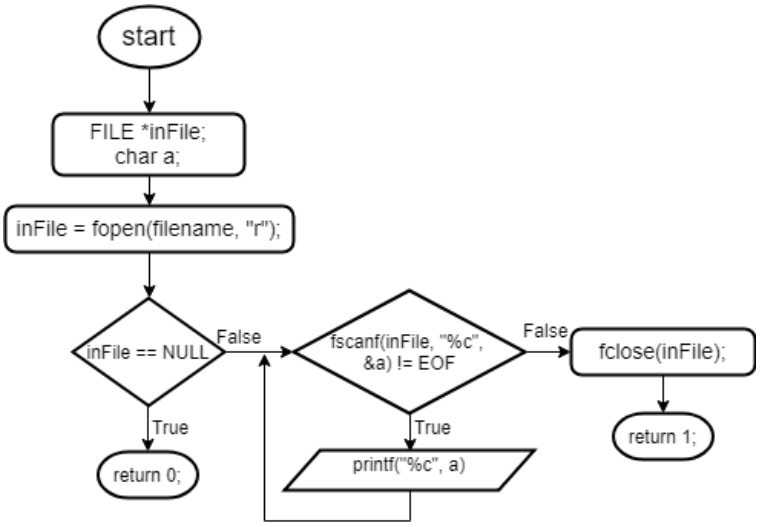
Project requirements:

This game will use the standard library such as <stdio.h>, <stdlib.h>, <string.h> , <time.h>, etc. Moreover, it will use the file to store the data of the player. When the game is over, it will show the biggest win and total credits that the player received from the dealer. The game uses array to store the deck of cards. At the beginning of the game, the random method will be used to random four cards from the deck.

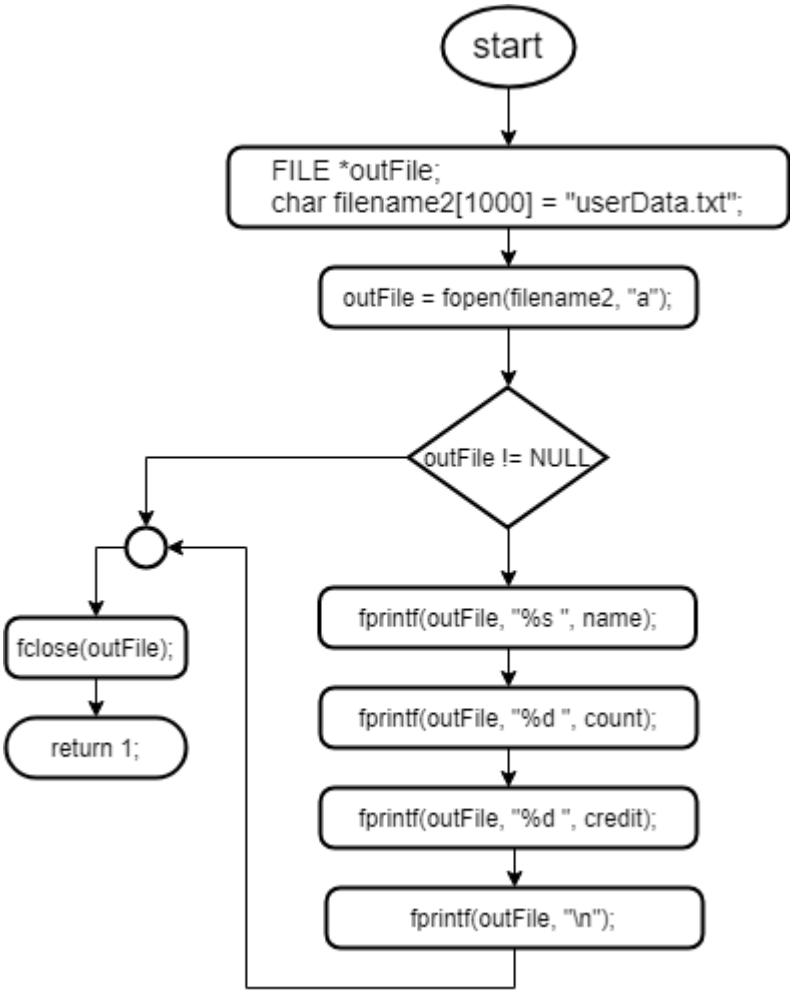
```
int betting(int money)
```



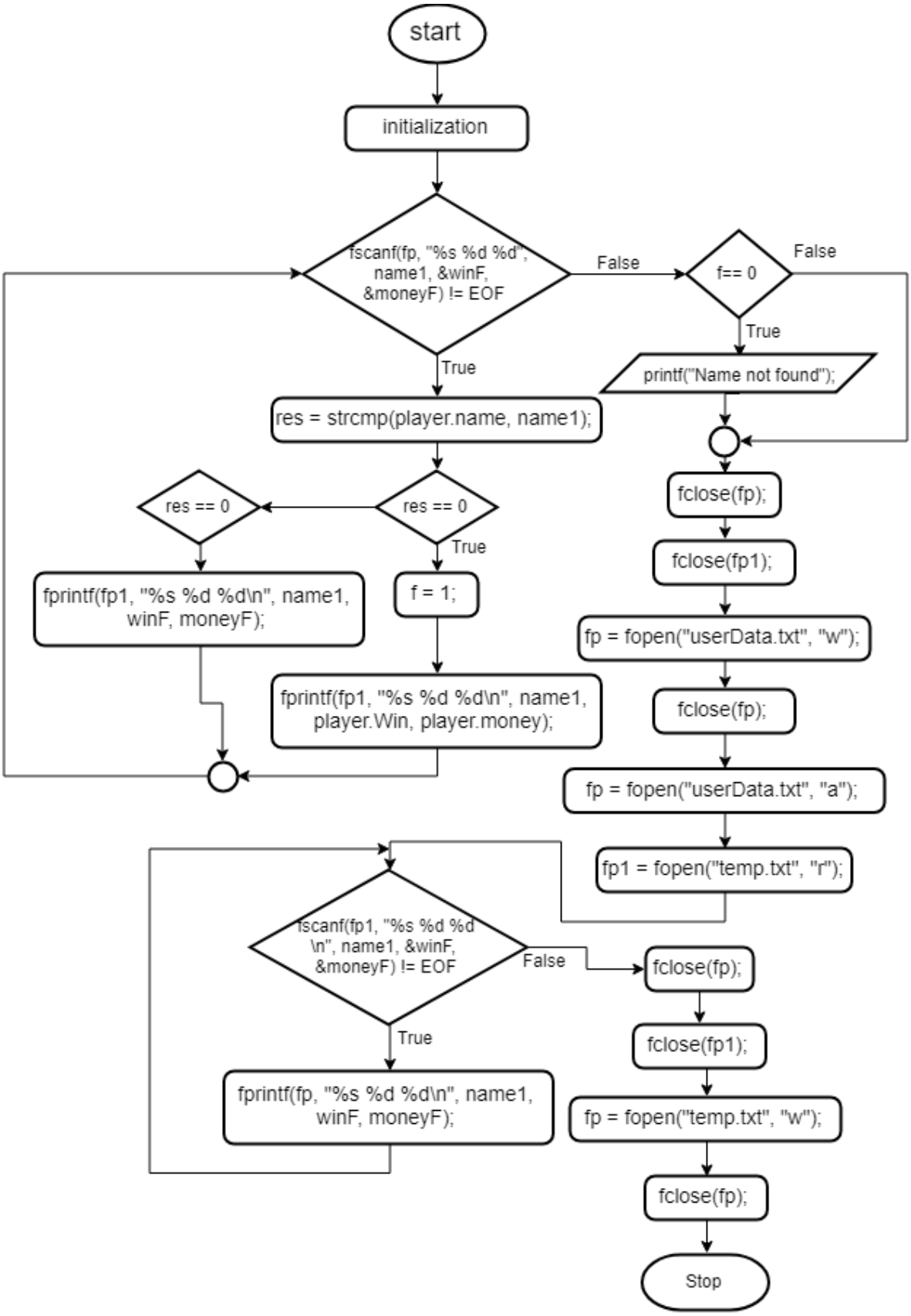
```
int displayFile(char *filename)
```



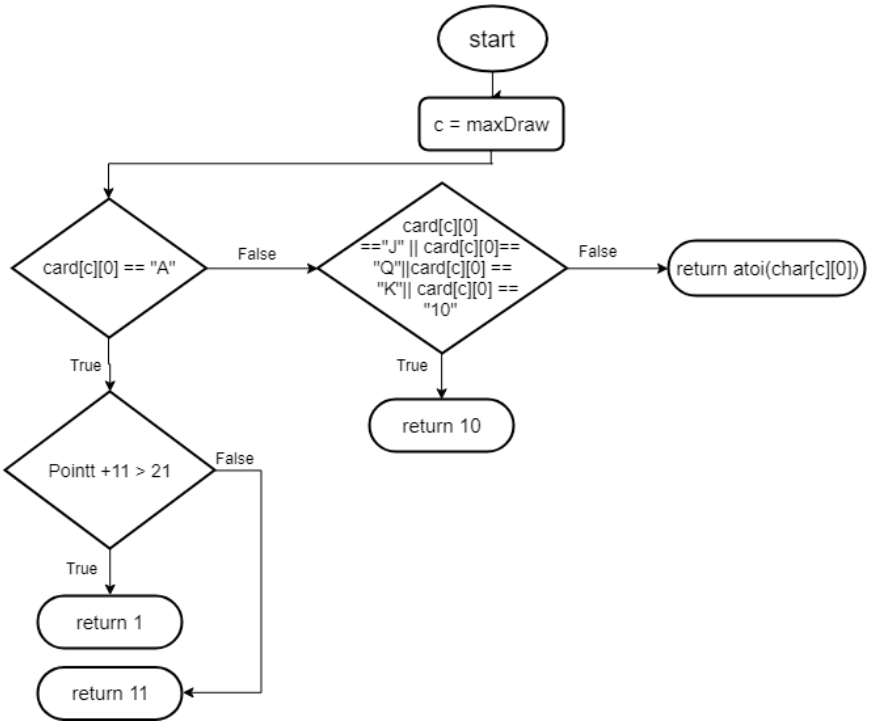

```
int writeFile(char *name,int count,int credit)
```



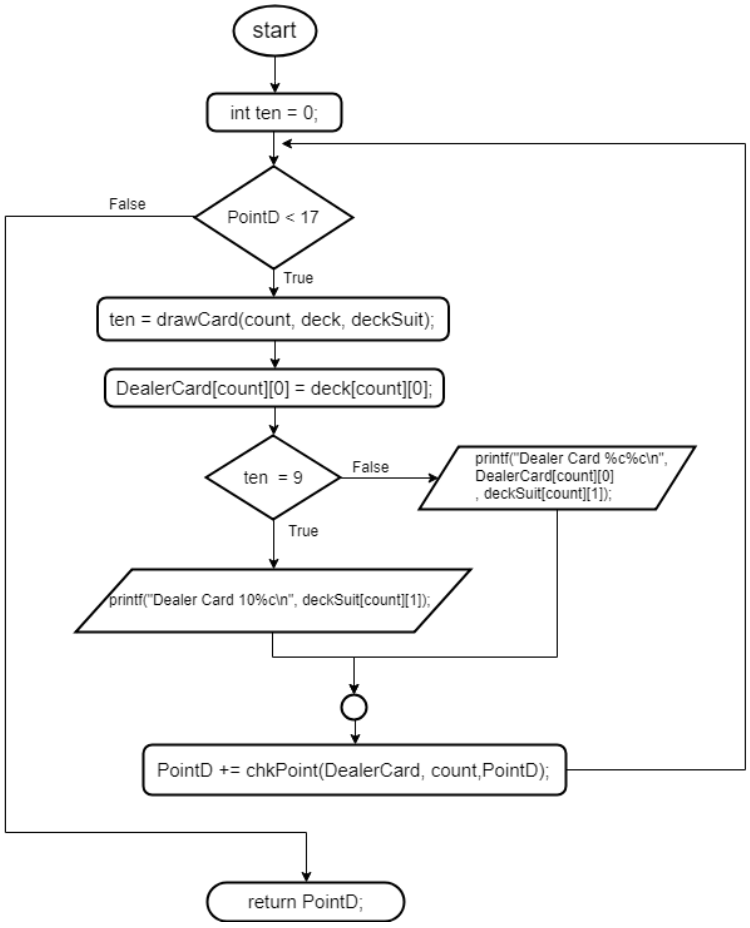
```
int updateFile(char name1[50] , int winF , int moneyF , struct Player player)
```



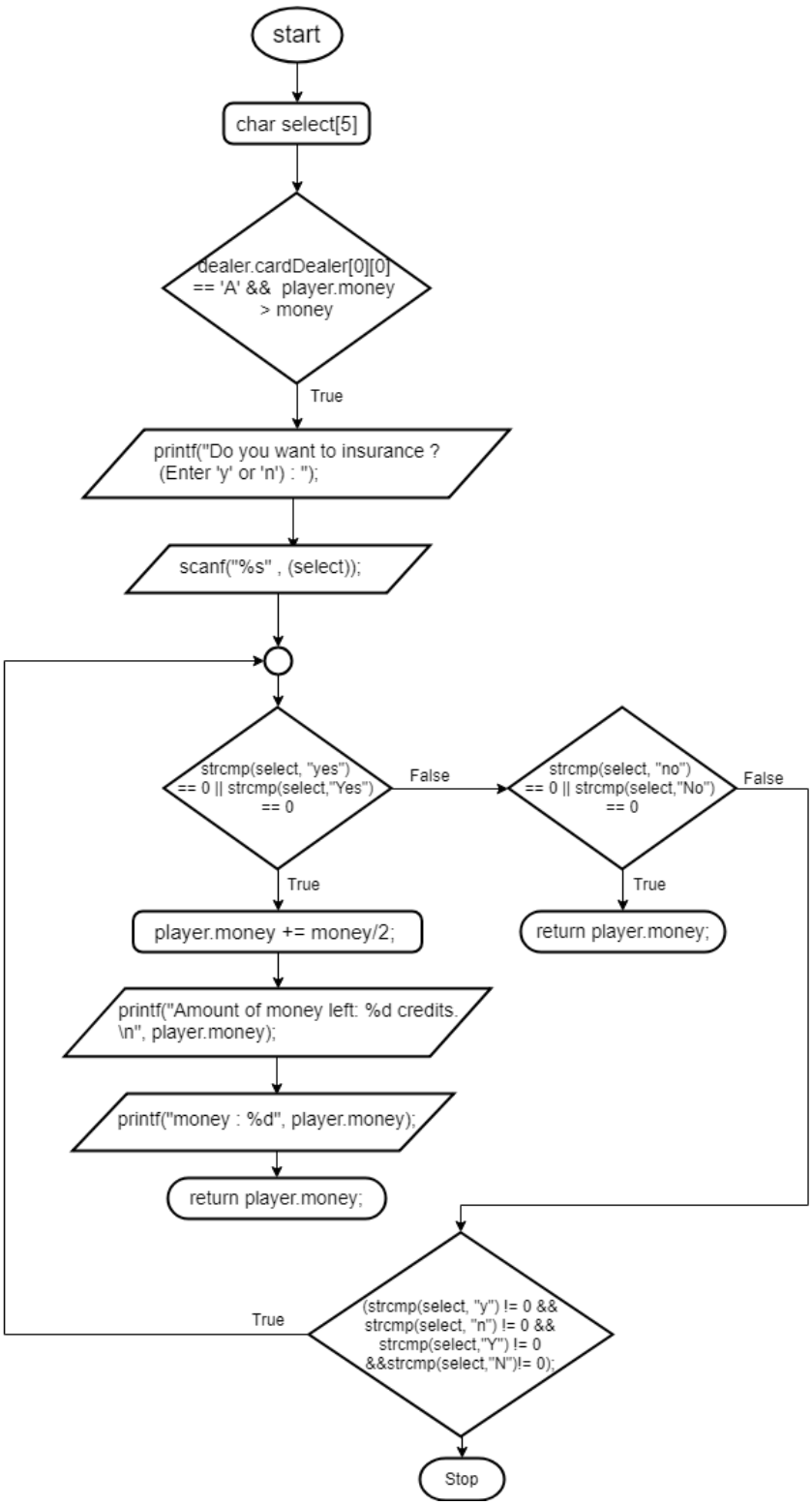
```
int chkPoint(char card[][2], int maxDraw, int Pointt)
```



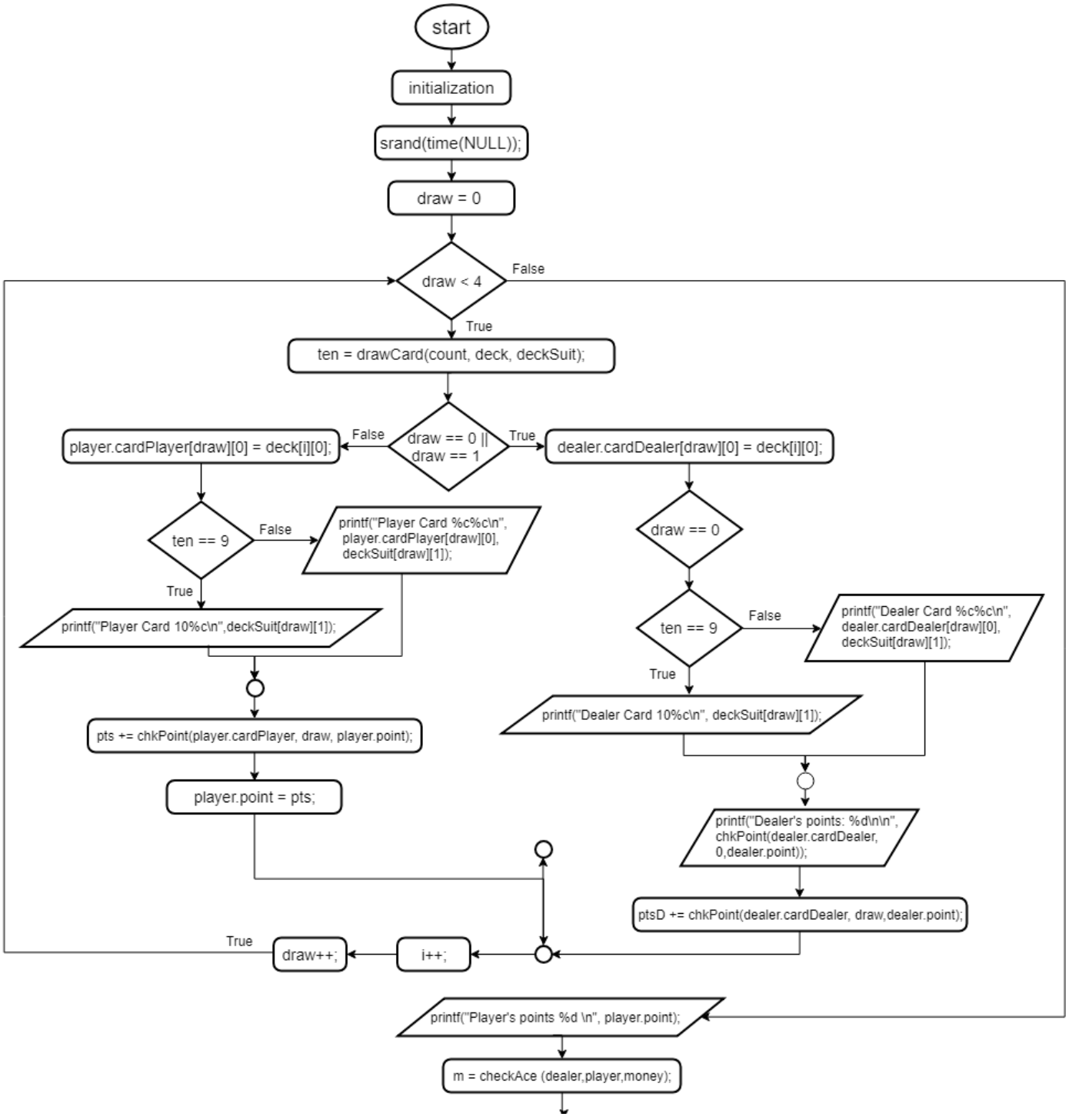

```
int ranCardDealer(char DealerCard[][2], int count, int PointD, char deck[CARDS][2],
char deckSuit[CARDS][1])
```

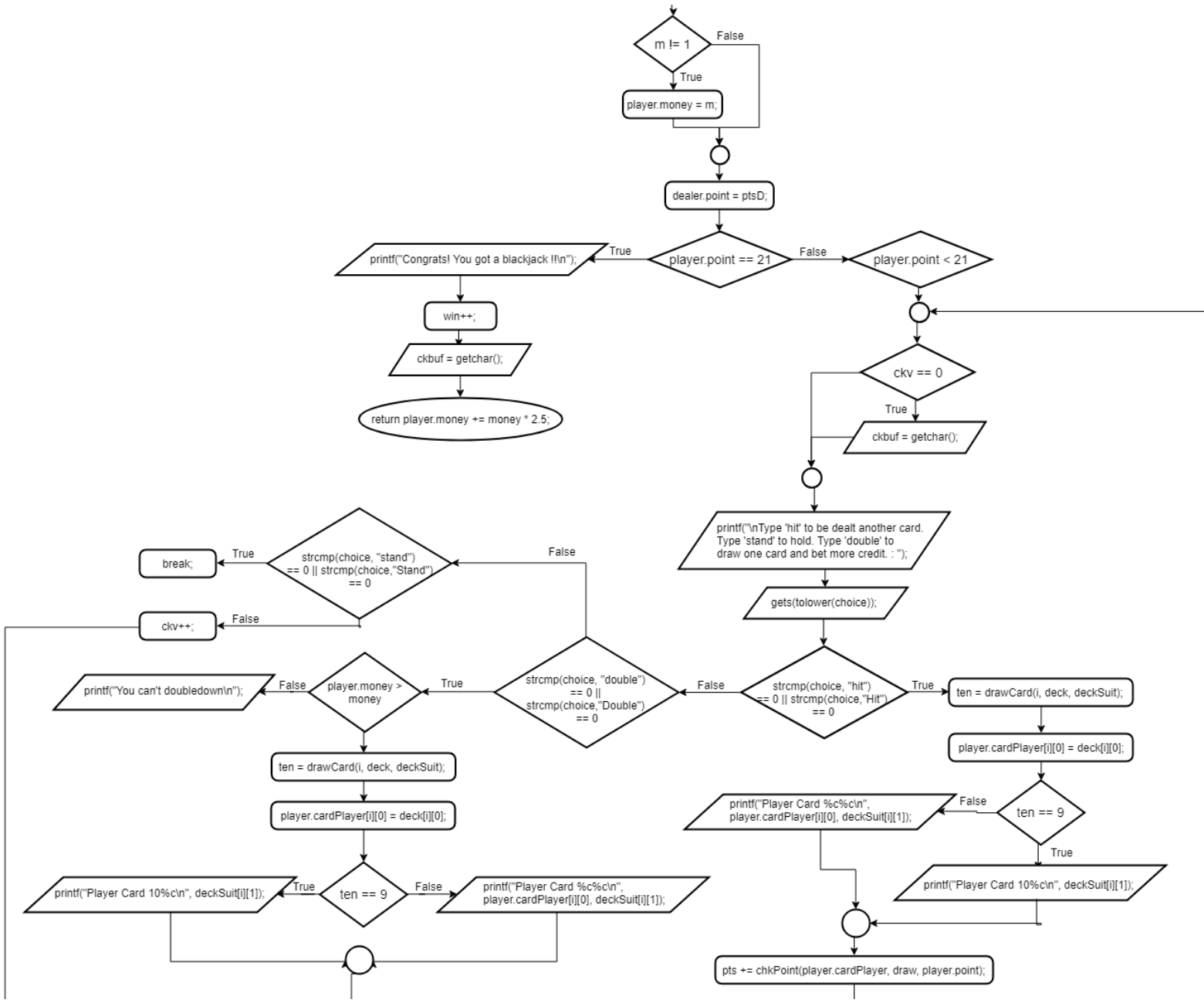


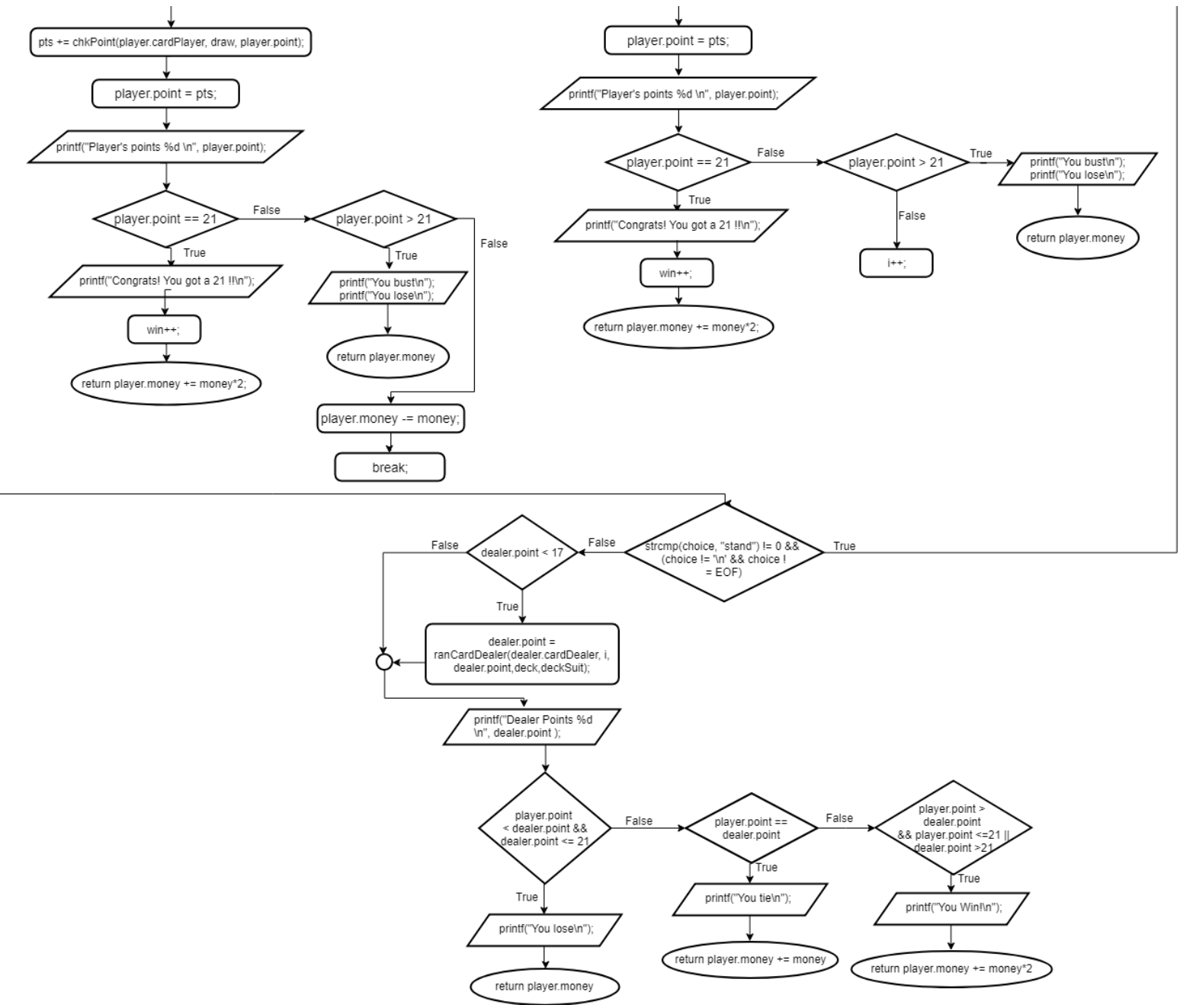
```
int checkAce(struct Dealer dealer ,struct Player player , int money)
```

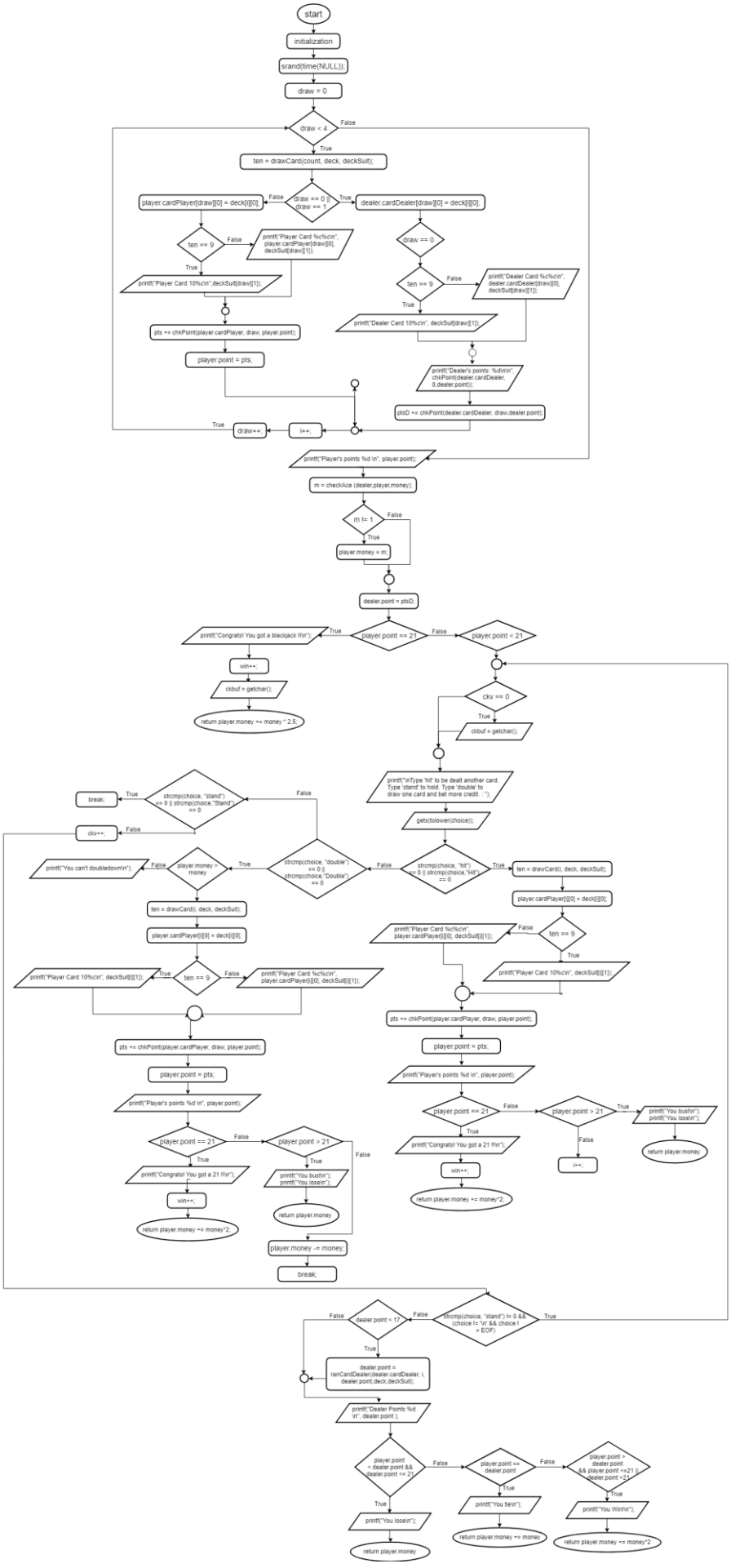


```
int play(struct Player player, struct Dealer dealer,int money)
```

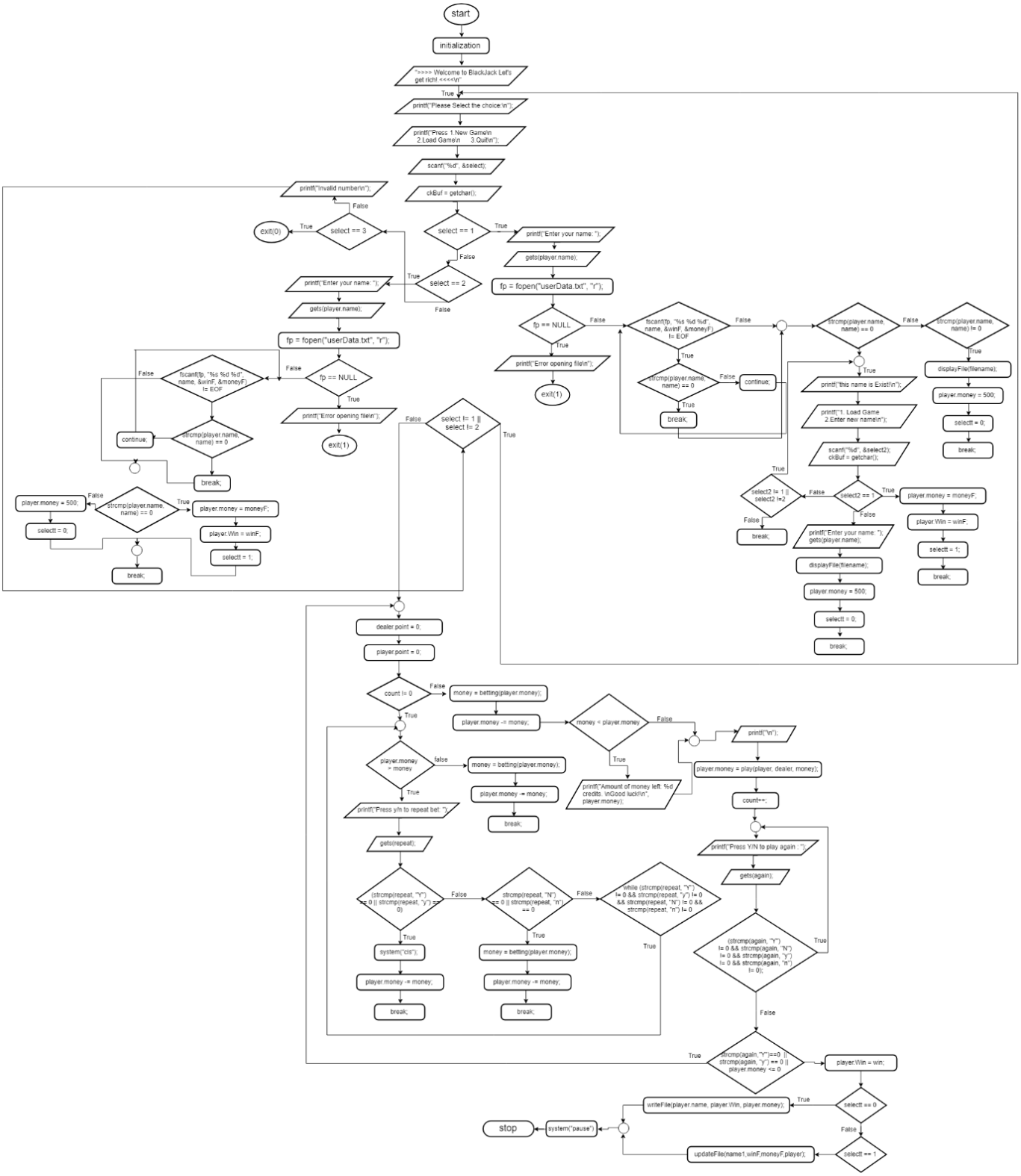


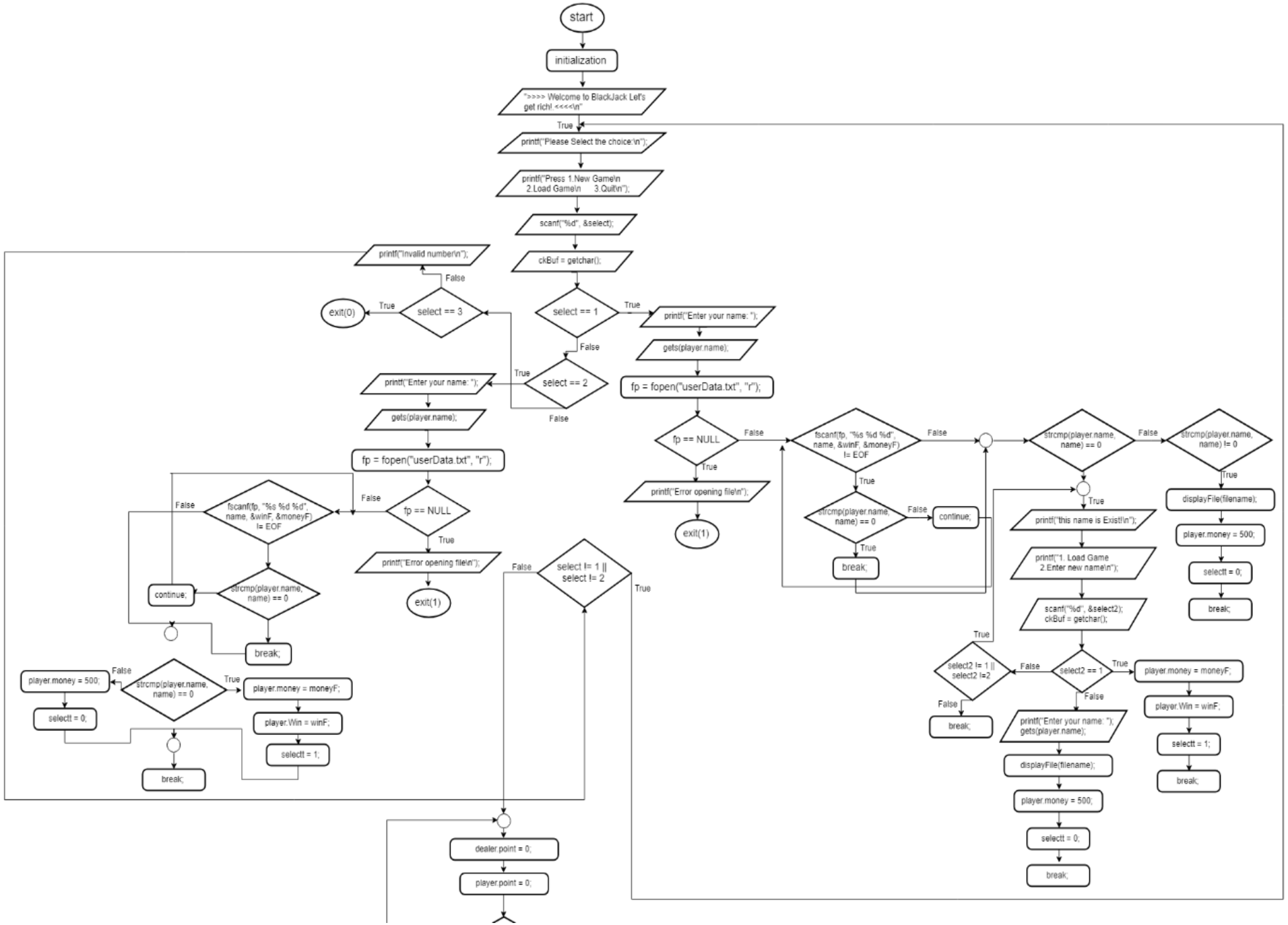

m != 1
False
True
player.money = m;
dealer.point = ptsD;
player.point == 21
True
printf("Congrats! You got a blackjack !!\n");
win++;
ckbuf = getchar();
return player.money += money * 2.5;
False
player.point < 21
ckv == 0
True
ckbuf = getchar();
printf("\nType 'hit' to be dealt another card.
Type 'stand' to hold. Type 'double' to
draw one card and bet more credit. : ");
gets(tolower(choice));
strcmp(choice, "hit")
== 0 || strcmp(choice,"Hit")
== 0
True
ten = drawCard(i, deck, deckSuit);
player.cardPlayer[i][0] = deck[i][0];
ten == 9
False
printf("Player Card %c%c\n",
player.cardPlayer[i][0], deckSuit[i][1]);
True
printf("Player Card 10%c\n", deckSuit[i][1]);
pts += chkPoint(player.cardPlayer, draw, player.point);
strcmp(choice, "double")
== 0 ||
strcmp(choice,"Double")
== 0
False
True
player.money >
money
False
printf("You can't doubledown\n");
True
ten = drawCard(i, deck, deckSuit);
player.cardPlayer[i][0] = deck[i][0];
ten == 9
True
printf("Player Card 10%c\n", deckSuit[i][1]);
False
printf("Player Card %c%c\n",
player.cardPlayer[i][0], deckSuit[i][1]);
strcmp(choice, "stand")
== 0 || strcmp(choice,"Stand")
== 0
True
break;
False
ckv++;
False

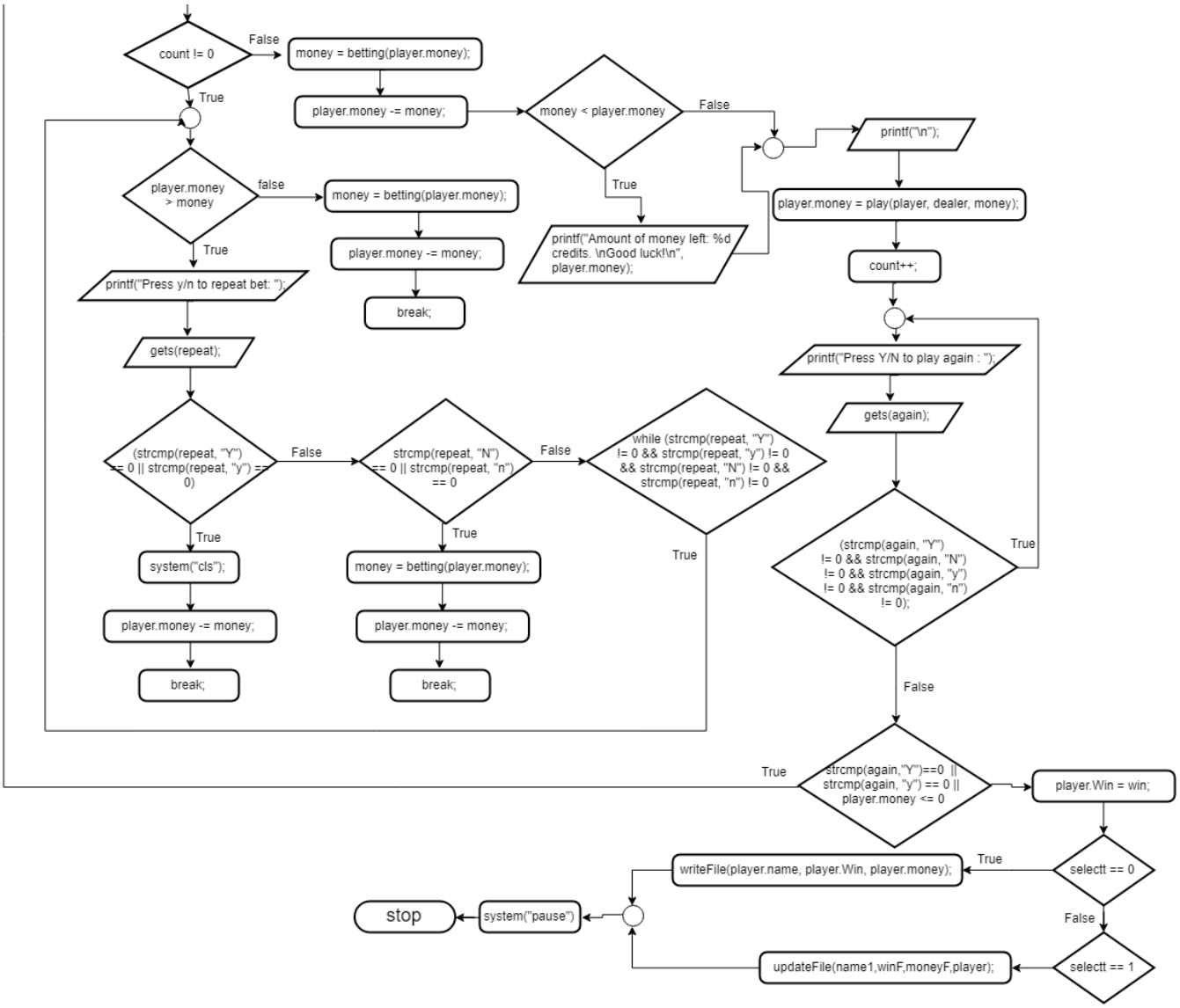

pts += chkPoint(player.cardPlayer, draw, player.point);
player.point = pts;
printf("Player's points %d \n", player.point);
player.point == 21
False
True
printf("Congrats! You got a 21 !!\n");
win++;
return player.money += money*2;
player.point > 21
True
False
printf("You bust\n");
printf("You lose\n");
return player.money
player.money -= money;
break;
player.point = pts;
printf("Player's points %d \n", player.point);
player.point == 21
False
True
printf("Congrats! You got a 21 !!\n");
win++;
return player.money += money*2;
player.point > 21
True
False
printf("You bust\n");
printf("You lose\n");
return player.money
i++;
strcmp(choice, "stand") != 0 && (choice != '\n' && choice != EOF)
True
False
dealer.point < 17
False
True
dealer.point = ranCardDealer(dealer.cardDealer, i, dealer.point,deck,deckSuit);
printf("Dealer Points %d \n", dealer.point);
player.point < dealer.point && dealer.point <= 21
True
False
printf("You lose\n");
return player.money
player.point == dealer.point
True
False
printf("You tie\n");
return player.money += money
player.point > dealer.point && player.point <=21 || dealer.point >21
True
printf("You Win!\n");
return player.money += money*2


start
initialization
srand((time(NULL));
draw = 0
draw < 4
False
True
ten = drawCard(count, deck, deckSuit);
draw == 0 || draw == 1
False
True
player.cardPlayer[draw][0] = deck[i][0];
dealer.cardDealer[draw][0] = deck[i][0];
ten == 9
False
True
printf("Player Card %c%c\n", player.cardPlayer[draw][0], deckSuit[draw][1]);
printf("Player Card 10%c\n",deckSuit[draw][1]);
draw == 0
ten == 9
False
True
printf("Dealer Card %c%c\n", dealer.cardDealer[draw][0], deckSuit[draw][1]);
printf("Dealer Card 10%c\n", deckSuit[draw][1]);
pts += chkPoint(player.cardPlayer, draw, player.point);
player.point = pts;
printf("Dealer's points: %d\n\n", chkPoint(dealer.cardDealer, 0,dealer.point));
ptsD += chkPoint(dealer.cardDealer, draw,dealer.point);
True
draw++
i++;
printf("Player's points %d \n", player.point);
m = checkAce (dealer.player,money);
m != 1
False
True
player.money = m;
dealer.point = ptsD;
player.point == 21
True
False
player.point < 21
printf("Congrats! You got a blackjack !!\n");
win++;
ckbuf = getchar();
return player.money += money * 2.5;
ckv == 0
True
ckbuf = getchar();
printf("\nType 'hit' to be dealt another card. Type 'stand' to hold. Type 'double' to draw one card and bet more credit. : ");
gets(tolower(choice));
strcmp(choice, "hit") == 0 || strcmp(choice,"Hit") == 0
True
False
ten = drawCard(i, deck, deckSuit);
player.cardPlayer[i][0] = deck[i][0];
strcmp(choice, "double") == 0 || strcmp(choice,"Double") == 0
True
False
player.money > money
True
False
printf("You can't doubledown\n");
ten = drawCard(i, deck, deckSuit);
player.cardPlayer[i][0] = deck[i][0];
ten == 9
True
False
printf("Player Card 10%c\n", deckSuit[i][1]);
printf("Player Card %c%c\n", player.cardPlayer[i][0], deckSuit[i][1]);
pts += chkPoint(player.cardPlayer, draw, player.point);
player.point = pts;
printf("Player's points %d \n", player.point);
player.point == 21
True
False
player.point > 21
True
False
printf("Congrats! You got a 21 !!\n");
win++;
return player.money += money*2;
printf("You bust\n");
printf("You lose\n");
return player.money
player.money -= money;
break;
strcmp(choice, "stand") == 0 || strcmp(choice,"Stand") == 0
True
False
break;
ckv++;
False
printf("Player Card %c%c\n", player.cardPlayer[i][0], deckSuit[i][1]);
ten == 9
False
True
printf("Player Card 10%c\n", deckSuit[i][1]);
pts += chkPoint(player.cardPlayer, draw, player.point);
player.point = pts;
printf("Player's points %d \n", player.point);
player.point == 21
False
True
printf("Congrats! You got a 21 !!\n");
win++;
return player.money += money*2;
player.point > 21
True
False
printf("You bust\n");
printf("You lose\n");
return player.money
i++;
dealer.point < 17
False
True
strcmp(choice, "stand") != 0 && (choice != "\n" && choice != EOF)
False
True
dealer.point = ranCardDealer(dealer.cardDealer, i, dealer.point,deck,deckSuit);
printf("Dealer Points %d \n", dealer.point);
player.point < dealer.point && dealer.point <= 21
True
False
printf("You lose\n");
return player.money
player.point == dealer.point
False
True
printf("You tie\n");
return player.money += money
player.point > dealer.point && player.point <=21 || dealer.point > 21
False
True
printf("You Win\n");
return player.money += money*2;

```
int main()
```


start
initialization
">>>> Welcome to BlackJack Let's get rich! <<<<\n"
True
printf("Please Select the choice:\n");
printf("Press 1.New Game\n 2.Load Game\n 3.Quit\n");
scanf("%d", &select);
ckBuf = getchar();
printf("invalid number\n");
False
exit(0);
True
select == 3
select == 1
True
printf("Enter your name: ");
gets(player.name);
False
select == 2
True
printf("Enter your name: ");
gets(player.name);
False
fp = fopen("userData.txt", "r");
fp == NULL
True
printf("Error opening file\n");
exit(1)
False
fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF
False
True
strcmp(player.name, name) == 0
False
True
break;
continue;
strcmp(player.name, name) == 0
False
True
printf("this name is Exist!\n");
printf("1. Load Game 2.Enter new name\n");
scanf("%d", &select2);
ckBuf = getchar();
select2 != 1 || select2 !=2
True
False
select2 == 1
True
False
break;
player.money = moneyF;
player.Win = winF;
selectt = 1;
break;
printf("Enter your name: ");
gets(player.name);
displayFile(filename);
player.money = 500;
selectt = 0;
break;
strcmp(player.name, name) != 0
True
displayFile(filename);
player.money = 500;
selectt = 0;
break;
fp = fopen("userData.txt", "r");
fp == NULL
True
printf("Error opening file\n");
exit(1)
False
fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF
False
True
strcmp(player.name, name) == 0
False
True
break;
continue;
select != 1 || select != 2
True
False
player.money = 500;
selectt = 0;
strcmp(player.name, name) == 0
False
True
player.money = moneyF;
player.Win = winF;
selectt = 1;
break;
break;
dealer.point = 0;
player.point = 0;
count != 0
False
True
money = betting(player.money);
player.money -= money;
money < player.money
False
True
printf("Amount of money left: %d credits \nGood luck!\n", player.money);
printf("\n");
player.money = play(player, dealer, money);
count++;
player.money > money
false
True
money = betting(player.money);
player.money -= money;
break;
printf("Press y/n to repeat bet: ");
gets(repeat);
(strcmp(repeat, "Y") == 0 || strcmp(repeat, "y") == 0)
False
strcmp(repeat, "N") == 0 || strcmp(repeat, "n") == 0
False
while (strcmp(repeat, "Y") != 0 && strcmp(repeat, "y") != 0 && strcmp(repeat, "N") != 0 && strcmp(repeat, "n") != 0
True
True
system("cls");
player.money -= money;
break;
True
money = betting(player.money);
player.money -= money;
break;
printf("Press Y/N to play again .");
gets(again);
(strcmp(again, "Y") != 0 && strcmp(again, "N") != 0 && strcmp(again, "y") != 0 && strcmp(again, "n") != 0);
True
False
strcmp(again,"Y")==0 || strcmp(again, "y") == 0 || player.money <= 0
True
player.Win = win;
selectt == 0
True
False
writeFile(player.name, player.Win, player.money);
selectt == 1
updateFile(name1,winF,moneyF,player);
stop
system("pause")


start
initialization
">>>> Welcome to BlackJack Let's get rich! <<<<\n"
True
printf("Please Select the choice:\n");
printf("Press 1.New Game\n 2.Load Game\n 3.Quit\n");
scanf("%d", &select);
ckBuf = getchar();
printf("invalid number\n");
False
select == 3
True
exit(0)
select == 1
True
printf("Enter your name: ");
gets(player.name);
fp = fopen("userData.txt", "r");
False
select == 2
True
printf("Enter your name: ");
gets(player.name);
fp = fopen("userData.txt", "r");
fp == NULL
True
printf("Error opening file\n");
exit(1)
False
fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF
True
strcmp(player.name, name) == 0
True
break;
False
continue;
False
strcmp(player.name, name) == 0
True
printf("this name is Exist!\n");
printf("1. Load Game 2.Enter new name\n");
scanf("%d", &select2);
ckBuf = getchar();
select2 != 1 || select2 !=2
True
break;
False
select2 == 1
True
player.money = moneyF;
player.Win = winF;
selectt = 1;
break;
False
printf("Enter your name: ");
gets(player.name);
displayFile(filename);
player.money = 500;
selectt = 0;
break;
False
strcmp(player.name, name) != 0
True
displayFile(filename);
player.money = 500;
selectt = 0;
break;
False
fscanf(fp, "%s %d %d", name, &winF, &moneyF) != EOF
True
strcmp(player.name, name) == 0
True
continue;
False
break;
False
fp == NULL
True
printf("Error opening file\n");
exit(1)
False
select != 1 || select != 2
True
dealer.point = 0;
player.point = 0;
False
strcmp(player.name, name) == 0
True
player.money = moneyF;
player.Win = winF;
selectt = 1;
break;
False
player.money = 500;
selectt = 0;
break;


count != 0
False
money = betting(player.money);
player.money -= money;
money < player.money
False
True
printf("\n");
player.money = play(player, dealer, money);
count++;
printf("Amount of money left: %d credits. \nGood luck!\n", player.money);
player.money > money
false
True
money = betting(player.money);
player.money -= money;
break;
printf("Press y/n to repeat bet: ");
gets(repeat);
(strcmp(repeat, "Y") == 0 || strcmp(repeat, "y") == 0)
False
strcmp(repeat, "N") == 0 || strcmp(repeat, "n") == 0
False
while (strcmp(repeat, "Y") != 0 && strcmp(repeat, "y") != 0 && strcmp(repeat, "N") != 0 && strcmp(repeat, "n") != 0
True
True
system("cls");
player.money -= money;
break;
True
money = betting(player.money);
player.money -= money;
break;
True
printf("Press Y/N to play again : ");
gets(again);
(strcmp(again, "Y") != 0 && strcmp(again, "N") != 0 && strcmp(again, "y") != 0 && strcmp(again, "n") != 0);
True
False
True
strcmp(again,"Y")==0 || strcmp(again, "y") == 0 || player.money <= 0
player.Win = win;
selectt == 0
True
writeFile(player.name, player.Win, player.money);
False
selectt == 1
updateFile(name1,winF,moneyF,player);
system("pause")
stop

```
int drawCard(int i, char deck[CARDS][2], char deckSuit[CARDS][1])
```