

**“BLOOD BANK MANAGEMENT SYSTEM”**

**DEVELOPED BY –**

**MADHAV KHATTAR**

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# OVERVIEW

CODE  
LANGUAGE



**C**

USERNAME



**@bloodbank**

PASSWORD



**@b123**

PLATFORM USED



**VS CODE**

CONCEPT USED FOR  
STORING AND  
EXTRACTING  
INFORMATION



**FILE HANDLING**

# PROGRAM



## USERNAME AND PASSWORD –

**(When entered wrong tries left -2)**

```
*****BLOOD BANK MANAGEMENT SYSTEM*****
```

```
Enter USERNAME: akrvbubvkuav
Enter PASSWORD: aruvbaev
```

```
ACCESS DENIED
```

```
Tries Remaining- 2
```

```
Enter 1 to try again or 2 to exit- 1
```

**(When entered correctly)**

```
*****BLOOD BANK MANAGEMENT SYSTEM*****
```

```
Enter USERNAME: @bloodbank
Enter PASSWORD: @b123
```

```
ACCESS GRANTED
```



# WELCOME PAGE :

\*\* WELCOME !!!! \*\*

\*\*\* BLOOD BANK !!!! \*\*\*

CHOOSE ONE OF THE FOLLOWING OPTIONS :

1. BLOOD STORAGE
2. PLASMA DATABASE
3. DONAR DATABASE
4. RECIPIENT DATABASE

TO EXIT ENTER '-1'

RESPONSE -

# 1. BLOOD STORAGE -

```
BLOOD STORAGE

1. VIEW STORAGE
2. UPDATE STORAGE

TO GO BACK ENTER -1

OPTION - █
```

## a. VIEW STORAGE –

```
*STORAGE*

(THE DATA REPRESENTED IS IN TERMS OF BLOOD BAGS)
( 1 blood bag = 300 ml)

1. A positive : 67
2. A negative : 45
3. O positive : 38
4. O negative : 27
5. B positive : 61
6. B negative : 57
7. AB positive : 45
8. AB negative : 34

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █
```

## **b. UPDATING STORAGE –**

UPDATING DATABASE

( ENTER IN UPPERCASE )

ENTER BLOOD GROUP TO BE UPDATED :- A+

CURRENT STORAGE :- 67

ENTER NEW STORAGE :- 68

STORAGE UPDATED !!

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

## **STORAGE UPDATED:**

\*STORAGE\*

(THE DATA REPRESENTED IS IN TERMS OF BLOOD BAGS)

( 1 blood bag = 300 ml)

1. A positive : 68
2. A negative : 45
3. O positive : 38
4. O negative : 27
5. B positive : 61
6. B negative : 57
7. AB positive : 45
8. AB negative : 34

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

# 1. PLASMA DATABASE:

## PLASMA STORAGE

( Plasma constitutes 55% of blood. It stores the antibodies in the human body whenever we catch a disease. It can be separated using centrifugation and is stored separately for different blood groups )

1. VIEW PLASMA STORAGE
2. UPDATE PLASMA STORAGE

TO GO BACK ENTER -1

OPTION - █

## a. VIEW DATABASE –

### \*STORAGE\*

(THE DATA REPRESENTED IS IN TERMS OF BLOOD BAGS)

( 1 blood bag = 250 ml)

1. Plasma for A positive : 43
2. Plasma for A negative : 56
3. Plasma for O positive : 54
4. Plasma for O negative : 24
5. Plasma for B positive : 36
6. Plasma for B negative : 43
7. Plasma for AB positive : 22
8. Plasma for AB negative : 38

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █



## b. UPDATING DATABASE –

### UPDATING PLASMA DATABASE

( ENTER IN UPPERCASE )

ENTER BLOOD GROUP TO UPDATE PLASMA DATABASE :- B+

CURRENT PLASMA STORAGE :- 36

ENTER NEW PLASMA STORAGE :- 54

STORAGE UPDATED !!

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

## STORAGE UPDATED:

### \*STORAGE\*

(THE DATA REPRESENTED IS IN TERMS OF BLOOD BAGS)

( 1 blood bag = 250 ml)

1. Plasma for A positive : 43
2. Plasma for A negative : 56
3. Plasma for O positive : 54
4. Plasma for O negative : 24
5. Plasma for B positive : 54
6. Plasma for B negative : 43
7. Plasma for AB positive : 22
8. Plasma for AB negative : 38

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

## 2. DONOR DATABASE :

DONAR DATABASE

CHOOSE ONE OF THE FOLLOWING OPTIONS :

1. VIEW DATABASE

2. ADD TO DATABASE

TO GO BACK ENTER '-1'

RESPONSE -

### a. VIEW DATABSE –

DONAR DATABASE

MADHAV KHATTAR  
19  
MALE  
B+  
9777721356

AKSHAT ROHIL  
18  
MALE  
O+  
9888821356

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 -

## b. UPDATING DATABASE –

ADD DATA TO DONAR DATABASE

LAYOUT TO ENTER DATA (EVERYTHING IN UPPERCASE):

NAME  
AGE  
SEX  
BLOOD GROUP  
CONTACT

(HIT ENTER TWICE WHEN FINISHED)

Ravindra Sharma  
45  
male  
B+  
9876543234

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

## DATABASE UPDATED

DONAR DATABASE

MADHAV KHATTAR  
19  
MALE  
B+  
9777721356

AKSHAT ROHIL  
18  
MALE  
O+  
9888821356

Ravindra Sharma  
45  
male  
B+  
9876543234

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

# 1. RECIPIENT DATABASE:

RECIPIENT DATABASE

CHOOSE ONE OF THE FOLLOWING OPTIONS :

1. VIEW DATABASE

2. ADD TO DATABASE

TO GO BACK ENTER '-1'

RESPONSE -

## a. VIEW DATABASE –

RECIPIENT DATABASE

MADHAV KHATTAR  
19  
MALE  
B+  
ROHINI,DELHI  
9777721356

AKSHAT ROHIL  
18  
MALE  
O+  
ROHINI,DELHI  
9888821356

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 -

## b. UPDATING DATABASE –

ADD DATA TO RECIPIENT DATABASE

LAYOUT TO ENTER DATA (EVERYTHING IN UPPERCASE):

NAME  
AGE  
SEX  
BLOOD GROUP  
ADDRESS  
CONTACT

(HIT ENTER TWICE WHEN FINISHED)

Rajeev Sharma  
34  
Male  
O+  
pitampura  
8976543456

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

## DATABASE UPDATED

RECIPIENT DATABASE

MADHAV KHATTAR  
19  
MALE  
B+  
ROHINI, DELHI  
9777721356

AKSHAT ROHIL  
18  
MALE  
O+  
ROHINI, DELHI  
9888821356

Rajeev Sharma  
34  
Male  
O+  
pitampura  
8976543456

TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - █

# SOURCE CODE -

```
#include<stdio.h>
#include<string.h>
#include<time.h> //library to delay code execution
#include<stdlib.h> //file management

void delay(int number_of_seconds) //delay function
{
    // Converting to milli seconds
    int milli_seconds = 1000 * number_of_seconds;

    // start time
    clock_t start_time = clock();

    while (clock() < start_time + milli_seconds)
        ;
}

struct bloodgroup{//structure for blood group
    long int d;
};
struct bloodgroup a_p,a_n,b_p,b_n,o_p,o_n,ab_p,ab_n;

struct plasma{//structure for plasma storage
    long int d;
};
struct plasma pa_p,pa_n,pb_p,pb_n,po_p,po_n,pab_p,pab_n;

int main(){
    system("cls");
    char user[25];
    char pass[25];
    int i,e;
    i=0;
    do{
        system("color 70");
        //header line
        printf("\n\n");
        printf("\t\t\t\t\t *****BLOOD BANK MANAGEMENT SYSTEM*****\n\n\n\n\n");

        // taking input
        printf("\t\t\t\t\t Enter USERNAME:  ");
        scanf("%s",user);
        printf("\t\t\t\t\t Enter PASSWORD:  ");
        scanf("%s",pass);
        printf("\n\n");

        //comparison of input
```

[illegible]

```
printf("\t\t\t\t\t 2.   A negative    : %d\n\n", a_n.d);
printf("\t\t\t\t\t 3.   O positive    : %d\n\n", o_p.d);
printf("\t\t\t\t\t 4.   O negative    : %d\n\n", o_n.d);
printf("\t\t\t\t\t 5.   B positive    : %d\n\n", b_p.d);
printf("\t\t\t\t\t 6.   B negative    : %d\n\n", b_n.d);
printf("\t\t\t\t\t 7.   AB positive   : %d\n\n", ab_p.d);
printf("\t\t\t\t\t 8.   AB negative   : %d\n\n\n\n", ab_n.d);

fclose(f1);fclose(f2);fclose(f3);fclose(f4);fclose(f5);fclose(f6);fclose(f7);fclose(f8);

int c;
printf("\t\t\t\t\t\t\t\t\t TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - ");
scanf("%d",&c);
if(c==1){system("cls");goto jump;}
else if(c==0){system("cls");}

}
if(option==2){//update storage
system("cls");
//OPENING FILES
FILE *f1,*f2,*f3,*f4,*f5,*f6,*f7,*f8;

char gr[10];
printf("\n\n\t\t\t\t\t\t\t\t\t UPDATING DATABASE\n\n\n\n");
printf("\t\t\t\t\t\t\t\t\t ( ENTER IN UPPERCASE )\n\n");
printf("\t\t\t\t\t\t\t\t\t ENTER BLOOD GROUP TO BE UPDATED :- ");
scanf("%s",gr);
printf("\n\n");
if(strcmp(gr,"A+")==0){
    int st;
    f1=fopen("BG a+.txt","w+");
    fscanf(f1,"%d",&a_p.d);
    printf("\t\t\t\t\t\t\t\t\t CURRENT STORAGE :- %d\n\n",a_p.d);
    printf("\t\t\t\t\t\t\t\t\t ENTER NEW STORAGE :- ");
    scanf("%d",&st);
    fprintf(f1,"%d",st);
    printf("\n\n\t\t\t\t\t\t\t\t\t STORAGE UPDATED !!");
    fclose(f1);

}
if(strcmp(gr,"A-")==0){
    int st;
    f2=fopen("BG a-.txt","w+");
    fscanf(f2,"%d",&a_n.d);
    printf("\t\t\t\t\t\t\t\t\t CURRENT STORAGE :- %d\n\n",a_n.d);
    printf("\t\t\t\t\t\t\t\t\t ENTER NEW STORAGE :- ");
    scanf("%d",&st);
    fprintf(f2,"%d",st);
    printf("\n\n\t\t\t\t\t\t\t\t\t STORAGE UPDATED !!");
    fclose(f2);

}
if(strcmp(gr,"B+")==0){
    int st;
```





```

        fclose(f7);
    }
    if(strcmp(gr,"AB-")==0){
        int st;
        f8=fopen("BG ab-.txt","w+");
        fscanf(f8,"%d",&ab_n.d);
        printf("\t\t\t\t\t\t\t CURRENT STORAGE :- %d\n\n",ab_n.d);
        printf("\t\t\t\t\t\t\t ENTER NEW STORAGE :- ");
        scanf("%d",&st);
        fprintf(f8,"%d",st);
        printf("\n\n\t\t\t\t\t\t\t STORAGE UPDATED !!");
        fclose(f8);
    }


    int c;
    printf("\n\n\t\t\t\t\t\t\t TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - ");
    scanf("%d",&c);
    if(c==1){system("cls");goto jump;}
    else if(c==0){system("cls");}

}

if(option==-1){//back
    system("cls");
    goto jump;}
}

if(response==2){//plasma
    int option;
    system("cls");
    printf("\n\n\t\t\t\t\t\t\t PLASMA STORAGE\n\n");
    printf("\t\t\t\t ( Plasma constitutes 55%% of blood. It stores the antibodies in th  
e human body whenever\n");
    printf("\t\t\t\t we catch a disease. It can be seperatedusing centrifugation and i  
s stored seperately \n\t\t\t\tfor different blood groups )\n\n\n");
    printf("\t\t\t\t\t\t\t 1. VIEW PLASMA STORAGE\n\n");
    printf("\t\t\t\t\t\t\t 2. UPDATE PLASMA STORAGE\n\n");
    printf("\t\t\t\t\t\t\tTO GO BACK ENTER -1\n\n\n\n");
    printf("\t\t\t\t\t\t\tOPTION - ");
    scanf("%d",&option);
    if(option==1){//plasma storage
        system("cls");
        FILE *f1,*f2,*f3,*f4,*f5,*f6,*f7,*f8;
        f1=fopen("pa+.txt","r");
        f2=fopen("pa-.txt","r");
        f3=fopen("pb+.txt","r");
        f4=fopen("pb-.txt","r");
        f5=fopen("po+.txt","r");
        f6=fopen("po-.txt","r");
        f7=fopen("pab+.txt","r");
        f8=fopen("pab-.txt","r");
        fscanf(f1,"%d",&pap.p.d);

```

[illegible]







```

printf("\t\t\t\t\t 1. VIEW DATABASE\n\n");
printf("\t\t\t\t\t 2. ADD TO DATABASE\n\n");
printf("\t\t\t\t\t TO GO BACK ENTER '-1' \n\n\n");
printf("\t\t\t\t\tRESPONSE - ");
scanf("%d",&option);
if(option==1){
    system("cls");
    printf("\n\n\t\t\t\t\t RECIPIENT DATABASE\n\n\n\n");
    char ch;
    FILE *fp;
    fp=fopen("recipient.txt","r");
    while(1){
        ch=fgetc(fp);
        if(ch==EOF){break;}
        printf("%c",ch);
    }
    fclose(fp);
}
if(option==2){
    system("cls");
    printf("\n\n\t\t\t\t\t ADD DATA TO RECIPIENT DATABASE\n\n\n\n");
    printf("\t\t\t\t\t LAYOUT TO ENTER DATA (EVERYTHING IN UPPERCASE): \n\n\n\n"
);

    printf("\t\t\t\t\t NAME\n");
    printf("\t\t\t\t\t AGE\n");
    printf("\t\t\t\t\t SEX\n");
    printf("\t\t\t\t\t BLOOD GROUP\n");
    printf("\t\t\t\t\t ADDRESS\n");
    printf("\t\t\t\t\t CONTACT\n\n\n");
    printf("\t\t\t\t\t (HIT ENTER TWICE WHEN FINISHED)\n\n\n");

    //working on file
    FILE *fp;
    fp=fopen("recipient.txt","a");
    char s[200];
    fputs("\n",fp);
    gets(s);
    while(strlen(gets(s))>0 ){
        fputs(s,fp);
        fputs("\n",fp);
    }
    fclose(fp);

}
if(option==-1){
    system("cls");
    goto jump;
}
int c;
printf("\t\t\t\t\t TO GO BACK ENTER 1 OR TO EXIT ENTER 0 - ");
scanf("%d",&c);
if(c==1){system("cls");goto jump;}
else if(c==0){system("cls");}
}

```

```
        if(response==-1){//exit  
            system("cls");  
        }  
  
    }  
  
else//access denied  
{printf("\t\t\t\t\t ACCESS DENIED\n\n");  
  
printf("\t\t\t\t Tries Remaining- %d\n\n", 2-i);  
  
//option to continue or exit  
printf("\t\t\t\tEnter 1 to try again or 2 to exit- ");  
scanf("%d",&e);  
i=i+1;  
system("cls");}  
}  
while(e==1&&i<3);  
printf("\n\n");  
  
if(e==2){}  
if(i==3){printf("\t\t\t\t\t SYSTEM LOCKED\n\n");}  
  
return 0;  
  
}
```



# **FILE HANDLING DATA**

## **CREATED -**

**.TXT FILES MADE**

**INFORMATION  
STORED**

**(Blood group storage)**

<b>BG a-</b>	<b>45</b>
<b>BG a+</b>	<b>67</b>
<b>BG b-</b>	<b>57</b>
<b>BG b+</b>	<b>61</b>
<b>BG o-</b>	<b>27</b>
<b>BG o+</b>	<b>38</b>
<b>BG ab+</b>	<b>45</b>
<b>BG ab-</b>	<b>34</b>

## (Plasma storage)

<b>pa-</b>	<b>56</b>
<b>pa+</b>	<b>43</b>
<b>pb-</b>	<b>43</b>
<b>pb+</b>	<b>36</b>
<b>po-</b>	<b>24</b>
<b>po+</b>	<b>54</b>
<b>pab-</b>	<b>38</b>
<b>pab+</b>	<b>22</b>

## (Donor information)

**donar.txt**

```
≡ donar.txt
1  MADHAV KHATTAR
2  19
3  MALE
4  B+
5  9777721356
6
7  AKSHAT ROHIL
8  18
9  MALE
10 O+
11 9888821356
12
```

## (Recipient information)

recipient.txt

```
≡ recipient.txt
1  MADHAV KHATTAR
2  19
3  MALE
4  B+
5  ROHINI,DELHI
6  9777721356
7
8  AKSHAT ROHIL
9  18
10 MALE
11 O+
12 ROHINI,DELHI
13 9888821356
14
15
```

-----**THANK YOU**-----