SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE

PROBLEM SOLVING WITH PROGRAMMING [R20]

(PSP-20ES104)

COURSE PROJECT on

"VACCINATION REGISTRATION SYSTEM"

(2022-23)

Developed By:

H.T.NO	STUDENT NAME
2203A51462	BAIRU SHIVATHMIKA
2203A51508	PERUMANDLA NITHYASREE

Under the Guidance of

Ms. SHOBHA REDDY

M.Tech(Ph.D)

Assistant Professor

Department Computer Science and Artificial Intelligence

SR ***University*** Warangal.

PROBLEM STATEMENT:

Develop a c application to add the details of the beneficiary's name to register vaccination registration in nearby hospital with the details of (name, age, gender, address, phone number, reference id). Adding the details of the vaccinated date.

Provide the functionality for below mentioned:

1. Read 'n' beneficiaries names details dynamically.

2. Sort (Ascending/Descending) 'n' beneficiaries names details according to:

- ➢ Name
- ➢ Age
- ➢ Date of Vaccination

3. Search 'n' beneficiaries' details according to:

- ➢ Name
- ➢ Age
- ➢ Id
- ➢ Vaccine Name

4.printing 'n' beneficiaries' on screen.

5.printing the beneficiaries' Vaccination Certificate details on the screen.

6.printing the statistics of beneficiaries on the screen.

MODULES:

In this application all variables and structure are declared globally so that these variables and structure members can be accessed throughout the program at any function call. We can choose any function by using function calls which are declared in switch-case. In order to repeat the loop control statement (while) is used with condition. The memory will be done in this program dynamically. The application asks the person who runs the program that how beneficiaries many data he/she want to store.

In this application four modules are used.

1. Read/Input

   In this module the application asks the person who runs the program to enter n beneficiaries' details. To give n beneficiaries' details while loop is used.

2. Sorting

   In this module sorting of data is done according to the chosen wise.

   In this module there is a sub menu which asks to select the sorting wise by press 9 using switch case. The sorting sub menu will be like press 1 to sort by name wise press 2 to sort by age wise press 3 to sort Date of Vaccination press 4to sort Location wise press 5 to sort by Vaccine Name.

   In this module we used another switch case statement so that the application helps to continue sorting. In the different sub menu have more modules are available. Mainly for loop, while loop, if statement, switch case statement, strcmp function are used in this module for different sorting.

3. Searching

In this module searching of data is done according to the chosen wise.

In this module there is which asks to select the search wise by using switch case in the menu. The menu will be like press 3 to search by Vaccine Name wise press 4 to search by name wise press 5 to search by age wise press 6 to search by Id.

In this module we used if, else statements, strcmp function, fopen,fclose ,freads ,for loop, while loop that the application asks to continue searching.

4. Print the n beneficiaries.

In this module all the stored details of n beneficiaries will be displayed on to the screen.

In this module printf ,fopen ,fclose, fread file handling functions and While loop is used.

5. Certificate

In this module beneficiary's certification is printed on the screen in terms beneficiaries name, age, gender, vaccine Name, date of vaccination, etc by using the id.

In this module if statement, printf function, strcmp functions, fopen ,fclose ,fread functions, while loop are used.

6. Statistics

In this module beneficiaries' statistics is printed on the screen in terms of their ages and minimum beneficiary age, maximum beneficiary age and average beneficiary age.

In this module if, else if statements, fopen, fclose, fread, while loop functions are used.

KNOWLEDGE REQUIRED TO DEVELOP THIS APPLICATION

a. Control Statements (if, if-else, switch)

b. Loop Statements (while/do while, for)

c. Arrays (1D/2D-arrays)

d. Strings (Strings and Table of strings) and its functions (strcpy, strcmp)

e. Functions (Any type of user defined functions)

f. Structure (structures and nested structures)

g. File Handling functions(fread,fclose,fwrite)

SOURCE CODE [HEADER FILE]:

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
struct Beneficiariy{
char name[50];
int age;
char gender[10];
char reference_id[20];//aadhaar card,ration card,etc
char phone_number[10];
char address[100];
char vaccinated_date[20];
int VaccinationStatus;
char VaccinatedDate[25];
char location[100];
char VaccineName[100];
};
struct Beneficiariy b;
int count;
void addBeneficiaries();
void print_beneficiaries();
void searchBeneficiarybyID();
```

```
void sortBeneficiariesByName();
void sortBeneficiariesByVaccineName();
void sortBeneficiariesByDate();
void calculateAgeStatistics();
void numBeneficiaries();
void sortBeneficiariesByLocation();
void searchBeneficiaryByage();
void searchBeneficiaryByVaccineName();
void addBeneficiaries()
{
printf("\n Add Beneficiarie name :");
scanf("%s",b.name);
printf("\n age:");
scanf("%d",&b.age);
printf("\n Gender:");
scanf("%s",b.gender);
printf("\n Address:");
scanf("%s",b.address);
printf("\n phonenumber:");
scanf("%s",b.phone_number);
printf("\n enter the reference id :");
scanf("%s",b.reference_id);
printf("\n enter the Vacccination Date:");
```

```
scanf("%s",b.VaccinatedDate);
printf("vaccination status:");
scanf("%d",&b.VaccinationStatus);
printf("place of Vaccination Hospital/Health centre:");
scanf(" %s",b.location);
printf("place of Vaccine Name:");
scanf(" %s",b.VaccineName);
FILE *fb;
fb=fopen("Beneficiariy.dat","a");
fwrite(&b,sizeof(struct Beneficiariy),1,fb);
fclose(fb);
}
void print_beneficiaries()
{
char opt;
FILE*fb;
fb=fopen("Beneficiariy.dat","r");
printf("\n<<<Beneficiariy DETAILS>>>\n");
printf("ID Name Gender Age VaccineName\n----------
----------");
while(fread(&b,sizeof(struct Beneficiariy),1,fb)>0)
printf("\n%s %-11s %-6s %-3d %s"
,b.reference_id,b.name,b.gender,b.age,b.VaccineName);
fclose(fb);
}
```

```
void certificate();
void certificate()
{
FILE*fb;
fb=fopen("Beneficiariy.dat","r");
char id[20];
printf("\nEnter Id: ");
scanf("%s", id);
int found = 0;
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
 if (strcmp(b.reference_id, id) == 0) {
 found = 1;
 printf("\n\tVACCINATION REGISTRATION SYSTEM\t \n");
 printf("\nBeneficiary Name  :%s", b.name);
 printf("\nBeneficiary Age   :%d", b.age);
 printf("\nGender\t\t:%s", b.gender);
 printf("\nVaccination status :%d", b.VaccinationStatus);
 printf("\nDate of Vaccination:%s",b.VaccinatedDate);
 printf("\nVaccine Name :%s",b.VaccineName);
 printf("\nplace of Vaccination:%s",b.location);
 printf("\nReference Idno:\t%s", b.reference_id);
 printf("\nPhone Number\t:%s", b.phone_number);
       }
   }
```

```
fclose(fb);
if (found!=1) {
printf("\nNo beneficiary with the provided ID found.");
    }
}
void searchBeneficiarybyID(){
FILE *fb;
char id[20];
char opt;
fb = fopen("Beneficiariy.dat", "r");
printf("\nEnter Id: ");
scanf("%s", id);
printf("\n<<<Beneficiariy DETAILS>>>\n");
printf("ID    Name    Gender    Age\n-----------------------------------------------");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
if (strcmp(b.reference_id, id) == 0) {
printf("\n%s %-11s  %-6s   %-3d", b.reference_id, b.name, b.gender, b.age);
printf("Do you Want Certificate? (Y/N): ");
scanf(" %c", &opt);
if (opt == 'Y' || opt == 'y') {
certificate();
     }
 else {
exit(0);
```

```
 }
 }
 }
 printf("\nThere is no beneficiary with the provided ID.");
fclose(fb);
}
void sortBeneficiariesByName() {
struct Beneficiariy beneficiaries[100];
 // Assuming a maximum of 100 beneficiaries
int numBeneficiaries = 0;
int i,j;
FILE *fb;
fb = fopen("Beneficiariy.dat", "r");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
beneficiaries[numBeneficiaries] = b;
numBeneficiaries++;
}
fclose(fb);
// Sort beneficiaries by name using bubble sort
for ( i = 0; i < numBeneficiaries - 1; i++) {
for ( j = 0; j < numBeneficiaries - i - 1; j++) {
if (strcmp(beneficiaries[j].name, beneficiaries[j + 1].name) > 0) {
struct Beneficiariy temp = beneficiaries[j];
  beneficiaries[j] = beneficiaries[j + 1];
```

```
  beneficiaries[j + 1] = temp;
            }
        }
 }
printf("\n<<<Beneficiaries Sorted by Name>>>\n");
printf("ID  Name  Gender  Age  VaccineName  Address\n----------
------------------------------");
for(i = 0; i < numBeneficiaries; i++) {
struct Beneficiariy beneficiary = beneficiaries[i];
printf("\n%s %-11s  %-6s   %-3d  %s   %s", beneficiary.reference_id,
beneficiary.name, beneficiary.gender, beneficiary.age, beneficiary.VaccineName,
beneficiary.address);
    }
}
void sortBeneficiariesByAge() {
struct Beneficiariy beneficiaries[100];
// Assuming a maximum of 100 beneficiaries
int numBeneficiaries = 0;
int i,j;
FILE *fb;
fb = fopen("Beneficiariy.dat", "r");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
beneficiaries[numBeneficiaries] = b;
numBeneficiaries++;
  }
fclose(fb);
```

```
// Sort beneficiaries by age using bubble sort
for(i = 0; i < numBeneficiaries - 1; i++) {
 for(j = 0; j < numBeneficiaries - i - 1; j++) {
 if (beneficiaries[j].age > beneficiaries[j + 1].age) {
 struct Beneficiariy temp = beneficiaries[j];
 beneficiaries[j] = beneficiaries[j + 1];
 beneficiaries[j + 1] = temp;
          }
       }
   }
printf("\n<<<Beneficiaries Sorted by Age>>>\n");
printf("ID  Name  Gender  Age  VaccineName  Address\n----------
------------------------------");
for (i = 0; i < numBeneficiaries; i++) {
struct Beneficiariy beneficiary = beneficiaries[i];
printf("\n%s %-11s  %-6s   %-3d  %s   %s", beneficiary.reference_id,
beneficiary.name, beneficiary.gender, beneficiary.age, beneficiary.VaccineName,
beneficiary.address);
   }
}
void sortBeneficiariesByDate() {
struct Beneficiariy beneficiaries[100];
 // Assuming a maximum of 100 beneficiaries
int numBeneficiaries = 0;
 int i,j;
 FILE *fb;
```

```
 fb = fopen("Beneficiariy.dat", "r");
 while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
 beneficiaries[numBeneficiaries] = b;
  numBeneficiaries++;
    }
 fclose(fb);
 // Sort beneficiaries by date of vaccination using bubble sort
for(i = 0; i < numBeneficiaries - 1; i++) {
for(j = 0; j < numBeneficiaries - i - 1; j++) {
// Assuming the date format is "YYYY-MM-DD"
int year1, month1, day1;
int year2, month2, day2;
scanf(beneficiaries[j].VaccinatedDate, "%d-%d-%d", &year1, &month1,
&day1);
scanf(beneficiaries[j + 1].VaccinatedDate, "%d-%d-%d", &year2, &month2,
&day2);
if (year1 > year2 || (year1 == year2 && month1 > month2) || (year1 == year2
&& month1 == month2 && day1 > day2)) {
                struct Beneficiariy temp = beneficiaries[j];
                beneficiaries[j] = beneficiaries[j + 1];
                beneficiaries[j + 1] = temp;
            }
  }
}
printf("\n<<<Beneficiaries Sorted by Date of Vaccination>>>\n");
```

```
printf("ID Name Gender Age PhoneNumber Address Vaccination Date\n----------------------------------------------------------------------");

for(i = 0; i < numBeneficiaries; i++) {

struct Beneficiariy beneficiary = beneficiaries[i];

printf("\n%s %-11s %-6s %-3d %s %s %s", beneficiary.reference_id, beneficiary.name, beneficiary.gender, beneficiary.age, beneficiary.phone_number, beneficiary.address, beneficiary.VaccinatedDate);

    }

}

void calculateStatistics() {

struct Beneficiariy beneficiaries[100];

 // Assuming a maximum of 100 beneficiaries

int numBeneficiaries = 0;

int i,j;

FILE *fb;

fb = fopen("Beneficiariy.dat", "r");

while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {

beneficiaries[numBeneficiaries] = b;

numBeneficiaries++;

}

fclose(fb);

int totalAge = 0;

int minAge = beneficiaries[0].age;

int maxAge = beneficiaries[0].age;

for (i = 0; i < numBeneficiaries; i++) {

totalAge += beneficiaries[i].age;
```

```
if (beneficiaries[i].age < minAge)
minAge = beneficiaries[i].age;
if (beneficiaries[i].age > maxAge)
maxAge = beneficiaries[i].age;
 }
float averageAge = (float)totalAge / numBeneficiaries;
printf("\n<<<Age Statistics>>>");
printf("\nTotal Beneficiaries: %d", numBeneficiaries);
printf("\nMinimum Age: %d", minAge);
printf("\nMaximum Age: %d", maxAge);
printf("\nAverage Age: %.2f", averageAge);
}
void numBeneficiaries()
{
 int numBeneficiaries = 0;
 FILE *fb;
 fb = fopen("Beneficiariy.dat", "r");
 while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0)
 numBeneficiaries++;
 }
printf("\n No.of beneficiaries %d till now",numBeneficiaries);
fclose(fb);
}
//void searchBeneficiaryByage();
```

```
void calculateAgeStatistics();

void calculateAgeStatistics() {

struct Beneficiariy beneficiaries[100]; // Assuming a maximum of 100
beneficiaries

int numBeneficiaries = 0;

int i,j;

FILE *fb;

 fb = fopen("Beneficiariy.dat", "r");

 while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {

 beneficiaries[numBeneficiaries] = b;

 numBeneficiaries++;

    }

fclose(fb);

int ageCounts[6] = {0}; // Array to store the counts for different age groups

int totalBeneficiaries = 0;

for(i = 0; i < numBeneficiaries; i++) {

int age = beneficiaries[i].age;

if (age >= 18 && age <= 25) {

ageCounts[0]++;

 } else if (age >= 26 && age <= 35) {

ageCounts[1]++;

} else if (age >= 36 && age <= 45) {

 ageCounts[2]++;

 } else if (age >= 46 && age <= 55) {

 ageCounts[3]++;
```

```
 } else if (age >= 56 && age <= 65) {
 ageCounts[4]++;
} else if (age > 65) {
ageCounts[5]++;
}
totalBeneficiaries++;
}
printf("\n<<<Vaccination Statistics by Age Group>>>\n");
printf("Age Group\t\tCount\t\tPercentage\n");
printf("----------------------------------------\n");
char ageGroups[6][15] = {"18-25", "26-35", "36-45", "46-55", "56-65", "65+"};
for(i = 0; i < 6; i++) {
float percentage = (float)ageCounts[i] / totalBeneficiaries * 100;
 printf("%s\t\t\t%d\t\t%.2f%%\n", ageGroups[i], ageCounts[i], percentage);
 // Print bar graph
printf("|");
int barLength = (int)(percentage / 2);
for(j = 0; j < barLength; j++) {
printf("=");
  }
   printf("\n");
 }
}
void sortBeneficiariesByLocation() {
```

```
 struct Beneficiariy beneficiaries[100];
 int numBeneficiaries = 0;
int i, j;
FILE* fb;
fb = fopen("Beneficiariy.dat", "r");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
beneficiaries[numBeneficiaries] = b;
numBeneficiaries++;
 }
fclose(fb);
// Sort beneficiaries by location using bubble sort
for (i = 0; i < numBeneficiaries - 1; i++) {
for (j = 0; j < numBeneficiaries - i - 1; j++) {
if (strcmp(beneficiaries[j].location, beneficiaries[j + 1].location) > 0) {
struct Beneficiariy temp = beneficiaries[j];
beneficiaries[j] = beneficiaries[j + 1];
beneficiaries[j + 1] = temp;
        }
       }
   }
printf("\n<<<Beneficiaries Sorted by Location>>>\n");
printf("ID Name Gender Age VaccineName Location\n----------
----------");
for (i = 0; i < numBeneficiaries; i++) {
struct Beneficiariy beneficiary = beneficiaries[i];
```

```
printf("\n%s %-11s  %-6s   %-3d  %s   %s", beneficiary.reference_id,
beneficiary.name, beneficiary.gender, beneficiary.age, beneficiary.VaccineName,
beneficiary.location);

    }

}

void sortBeneficiariesByVaccineName() {

struct Beneficiariy beneficiaries[100]; // Assuming a maximum of 100
beneficiaries

int numBeneficiaries = 0;

int i, j;

FILE* fb;

fb = fopen("Beneficiariy.dat", "r");

while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {

beneficiaries[numBeneficiaries] = b;

numBeneficiaries++;

  }

fclose(fb);

// Sort beneficiaries by vaccine name using bubble sort

for(i = 0; i < numBeneficiaries - 1;i++){

for(j = 0; j < numBeneficiaries - i - 1; j++) {

if(strcmp(beneficiaries[j].VaccineName, beneficiaries[j + 1].VaccineName) > 0)
{

struct Beneficiariy temp = beneficiaries[j];

beneficiaries[j] = beneficiaries[j + 1];

 beneficiaries[j + 1] = temp;

    }
```

```
    }
    }
printf("\n<<<Beneficiaries Sorted by Vaccine Name>>>\n");
printf("ID Name Gender Age VaccineName Location\n----------
----------");
for (i = 0; i < numBeneficiaries; i++) {
struct Beneficiariy beneficiary = beneficiaries[i];
printf("\n%s %-11s %-6s %-3d %s %s", beneficiary.reference_id,
beneficiary.name, beneficiary.gender, beneficiary.age, beneficiary.VaccineName,
beneficiary.location);
    }
}
void searchBeneficiaryByVaccineName() {
FILE *fb;
char searchName[100];
int found = 0;
fb = fopen("Beneficiariy.dat", "r");
printf("Enter the Vaccine Name to search: ");
scanf("%s", searchName);
printf("\n<<<Beneficiary Details with Vaccine Name: %s>>>\n", searchName);
printf("ID Name Gender Age Vaccination Status Vaccination Date\n---
----------");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
if(strcmp(b.VaccineName, searchName) == 0) {
found = 1;
```

```
printf("\n%s %-11s  %-6s   %-3d  %d   %s", b.reference_id, b.name, b.gender,
b.age, b.VaccinationStatus, b.VaccinatedDate);

        }

    }

fclose(fb);

if (found!=0) {

printf("\nNo beneficiaries found with the provided Vaccine
Name:      %s",searchName);

    }

}

void searchBeneficiaryByName() {

FILE* fb;

 char name[50];

 int found = 0;

 fb = fopen("Beneficiariy.dat", "r");

 printf("\nEnter the name to search: ");

 scanf("%s", name);

 printf("\n<<<Beneficiaries Matching the Name: %s>>>\n", name);

printf("ID  Name  Gender  Age  VaccineName\n----------------------------
------------------");

while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {

if (strcmp(b.name, name) == 0) {

printf("\n%s %-11s  %-6s   %-3d  %s", b.reference_id, b.name, b.gender, b.age,
b.VaccineName);

found = 1;

    }
```

```
    }
fclose(fb);
if (found!=1) {
printf("\nNo beneficiaries found with the provided name: %s", name);
}
}
void searchBeneficiaryByAge() {
int age;
int found = 0;
printf("Enter age to search beneficiaries: ");
scanf("%d", &age);
FILE* fb;
fb = fopen("Beneficiariy.dat", "r");
printf("\n<<<Beneficiary Details>>>\n");
printf("ID Name Gender Age VaccineName\n----------------------------------------");
while (fread(&b, sizeof(struct Beneficiariy), 1, fb) > 0) {
if (b.age == age) {
printf("\n%s %-11s %-6s %-3d %s", b.reference_id, b.name, b.gender, b.age, b.VaccineName);
found = 1;
  }
    }
fclose(fb);
if (found!=1) {
```

```
printf("\nNo beneficiaries found with the provided age.\n");
    }
}
```

SOURCE CODE [.C FILE]:

```
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
#include"Vaccine.h"
int main()
{
int choice;
printf("\n\n========WELCOME TO VACCINATION
CENTRE==========");
while(1){
printf("\n\nPlease select your prefered operation");
printf("\n\n1.to add Beneficiaries name:");
printf("\n2.Show Beneficiaries details");
printf("\n3.SearchByVaccineName");
printf("\n4.SearchingByName");
printf("\n5.SearchingByAge");
printf("\n6.Searching Beneficiaries via ID:");
printf("\n7.statistics Beneficiaries via Age");
printf("\n8.statistics of Vaccination persons: ");
printf("\n9.Sorting ascending order:");
```

```
printf("\n10.Count of Vaccination");
printf("\n11.Certificate Beneficiaries via ID: ");
printf("\n12.Exit\n");
printf("\n Your choice:\t");
scanf("%d",&choice);
switch(choice)
{
        case 1:addBeneficiaries();
        break;
        case 2: print_beneficiaries();
        break;
        case 3:searchBeneficiaryByVaccineName();
        break;
        case 4:searchBeneficiaryByName();
        break;
        case 5:searchBeneficiaryByAge();
        break;
        case 6:searchBeneficiarybyID();
        break;
        case 7: calculateAgeStatistics();
        break;
        case 8:calculateStatistics();
            break;
```

```
case 9: printf("\nSort Beneficiaries");
  printf("\n1. Sort by Name");
  printf("\n2. Sort by Age");
  printf("\n3. Sort by Date of Vaccination");
  printf("\n4.Sort by Location");
  printf("\n5.Sort by Vaccination Name");
  printf("\nEnter your choice: ");
  int sortChoice;
  scanf("%d", &sortChoice);
  switch (sortChoice) {
        case 1:
           sortBeneficiariesByName();
           break;
        case 2:
           sortBeneficiariesByAge();
           break;
        case 3:
           sortBeneficiariesByDate();
           break;
        case 4:sortBeneficiariesByLocation();
         break;
        case 5:sortBeneficiariesByVaccineName();
         break;
```

```
                }
        case 10:numBeneficiaries();
        break;
        case 11:certificate();
        break;
        case 12:exit(0);
        break;
        default:printf("\n you entered wrong choice");
                break;
}
}
return 0;
}
```

OUTPUT:

========WELCOME TO VACCINATION CENTRE==========

Please select your prefered operation
1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 1

Add Beneficiarie name :Nithyasree

age:20

Gender:Female

Address:
Hnk

phonenumber:9966832236

enter the reference id :12345678

enter the Vacccination Date:20-01-2021
vaccination status:01
place of Vaccination Hospital/Health centre:Medicalclg
place of Vaccine Name:Covaxin

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 1

Add Beneficiarie name :Shivathmika

age:19

Gender:Female

Address:Hnk

phonenumber:9988776655

enter the reference id :87654321

enter the Vacccination Date:01-02-2021
vaccination status:02
place of Vaccination Hospital/Health centre:wglhealthcentre
place of Vaccine Name:Co-win

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 2

<<<Beneficiariy DETAILS>>>
ID Name Gender Age VaccineName

12345678 Nithyasree Female 20 Covaxin
87654321 Shivathmika Female 19 Co-win

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 3
Enter the Vaccine Name to search: Covaxin

<<<Beneficiary Details with Vaccine Name: Covaxin>>>
ID Name Gender Age Vaccination Status Vaccination Date

12345678 Nithyasree Female 20 1 20-01-2021

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:

10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 4

Enter the name to search: Shivathmika

<<<Beneficiaries Matching the Name: Shivathmika>>>
ID Name Gender Age VaccineName

87654321 Shivathmika Female 19 Co-win

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 5
Enter age to search beneficiaries: 20
<<<Beneficiary Details>>>
ID Name Gender Age VaccineName

```
------------------------------------------------
12345678 Nithyasree   Female   20   Covaxin

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

 Your choice:   6

Enter Id: 87654321

<<<Beneficiariy DETAILS>>>
ID    Name    Gender    Age
------------------------------------------------
87654321 Shivathmika  Female   19 Do you Want Certificate? (Y/N): y

Enter Id: 87654321

        VACCINATION REGISTRATION SYSTEM
Beneficiary Name  :Shivathmika
Beneficiary Age   :19
```

Gender :Female
Vaccination status :2
Date of Vaccination:01-02-2021
Vaccine Name :Co-win
place of Vaccination:wglhealthcentre
Reference Idno: 87654321
Phone Number :9988776655
There is no beneficiary with the provided ID.

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 7

<<<Vaccination Statistics by Age Group>>>

Age Group	Count	Percentage
18-25	2	100.00%
26-35	0	0.00%

|
36-45 0 0.00%
|
46-55 0 0.00%
|
56-65 0 0.00%
|
65+ 0 0.00%

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 8

<<<Age Statistics>>>
Total Beneficiaries: 2
Minimum Age: 19
Maximum Age: 20
Average Age: 19.50

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 9

Sort Beneficiaries
1. Sort by Name
2. Sort by Age
3. Sort by Date of Vaccination
4.Sort by Location
5.Sort by Vaccination Name
Enter your choice: 1

<<<Beneficiaries Sorted by Name>>>
ID Name Gender Age VaccineName Address

12345678 Nithyasree Female 20 Covaxin
87654321 Shivathmika Female 19 Co-win
No.of beneficiaries 2 till now
Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 9

Sort Beneficiaries
1. Sort by Name
2. Sort by Age
3. Sort by Date of Vaccination
4.Sort by Location
5.Sort by Vaccination Name
Enter your choice: 2

<<<Beneficiaries Sorted by Age>>>
ID Name Gender Age VaccineName Address

87654321 Shivathmika Female 19 Co-win
12345678 Nithyasree Female 20 Covaxin
No.of beneficiaries 2 till now

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 9

Sort Beneficiaries
1. Sort by Name
2. Sort by Age
3. Sort by Date of Vaccination
4.Sort by Location
5.Sort by Vaccination Name
Enter your choice: 3

<<<Beneficiaries Sorted by Date of Vaccination>>>

ID	Name	Gender	Age	PhoneNumber	Address	Vaccination Date
87654321	Shivathmika	Female	19	9988776655		01-02-2021
12345678	Nithyasree	Female	20	9966832236		20-01-2021

No.of beneficiaries 2 till now

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit
Your choice: 9

Sort Beneficiaries
1. Sort by Name
2. Sort by Age
3. Sort by Date of Vaccination
4.Sort by Location
5.Sort by Vaccination Name
Enter your choice: 4

<<<Beneficiaries Sorted by Location>>>
ID Name Gender Age VaccineName Location

12345678 Nithyasree Female 20 Covaxin Medicalclg
87654321 Shivathmika Female 19 Co-win wglhealthcentre
No.of beneficiaries 2 till now

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 9

Sort Beneficiaries
1. Sort by Name
2. Sort by Age
3. Sort by Date of Vaccination
4.Sort by Location
5.Sort by Vaccination Name
Enter your choice: 5

<<<Beneficiaries Sorted by Vaccine Name>>>
ID Name Gender Age VaccineName Location

87654321 Shivathmika Female 19 Co-win wglhealthcentre
12345678 Nithyasree Female 20 Covaxin Medicalclg
No.of beneficiaries 2 till now

Please select your prefered operation
1.to add Beneficiaries name:

2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 10

No.of beneficiaries 2 till now

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit

Your choice: 11

Enter Id: 12345678

VACCINATION REGISTRATION SYSTEM

Beneficiary Name :Nithyasree
Beneficiary Age :20
Gender :Female
Vaccination status :1
Date of Vaccination:20-01-2021
Vaccine Name :Covaxin
place of Vaccination:Medicalclg
Reference Idno: 12345678
Phone Number :9966832236

Please select your prefered operation

1.to add Beneficiaries name:
2.Show Beneficiaries details
3.SearchByVaccineName
4.SearchingByName
5.SearchingByAge
6.Searching Beneficiaries via ID:
7.statistics Beneficiaries via Age
8.statistics of Vaccination persons:
9.Sorting ascending order:
10.Count of Vaccination
11.Certificate Beneficiaries via ID:
12.Exit
Your choice: 1
