|  |  |
| --- | --- |
| **Ex.No:15.a** | **FILE ALLOCATION STRATEGIES** |
| **SEQUENTIAL** |

# AIM:

To write a C program for sequential file for processing the student information.

# ALGORITHM:

Step-1: Start the program.

Step-2: Get the number of records user want to store in the system.

Step-3: Using Standard Library function open the file to write the data into the file. Step-4: Store the entered information in the system.

Step-5: Using do..While statement and switch case to create the options such as 1-DISPLAY, 2.SEARCH, 3.EXIT.

Step-6: Close the file using fclose() function. Step-7: Process it and display the result.

Step-8: Stop the program.

# PROGRAM:

#include<stdio.h> #include<conio.h> typedef struct

{int sno;

char name[25];int m1,m2,m3;

}STD;

void display(FILE \*); int search(FILE \*); void main()

{int i,n,sno\_key,opn; FILE \*fp;

clrscr();

printf(“How many records ?”); scanf(“%d”,&n); fp=fopen(“stud.dat”,”w”); for(i=0;i<n;i++)

{printf(“Enter the student information : %d(sno,Name,M1,M2,M3):”,i+1); scanf(“%d%s%d%d%d,&s.sno,s.name,&s.m1,&s.m2,&s.m3); fwrite(&s,sizeof(s),1,fp);

}

fclose(fp); fp=fopen(“stdu.dat”,”r”);

do

{printf(“1-DISPLAY\n2.SEARCH\n 3.EXIT\n YOUR OPTION: “);

scanf(“%d”,&open); switch(opn)

{

case 1:

printf(“\n Student Records in the file \n”); display(fp);

break; case 2:

printf(“Read sno of the student to be searched :”); scanf(“%d”,&sno\_key);

if(search(fp,sno\_key)){

printf(“success!! Record found in the file\n”); printf(“%d\t%s\t%d\t%d\t%d\n”, s.sno,s.name,s.m1,s.m2,s.m3);

}

else

printf(“Failure!! Record %d not found\n”,sno\_key); break;

case 3:

printf(“Exit !! press key”); getch();

break; default:

printf(“Invalid option!!! Try again!!\n”); break;

}

}while(opn!=3); fclose(fp);

}

Void display(FILE \*fp)

{rewind(fp); while(fread(&s,sizeof(s),1,fp))

printf(“%d\t%s\t%d\t%d\t%d\n”,s.sno,s.name,s.m1,s.m2,s.m3);

}

int search(FILE \*fp,int sno\_key)

{rewind(fp); while(fread(&s,sizeof(s),1,fp)) If(s.sno==sno\_key)

return 1;

return 0;

}