# Institute of Technology of Cambodia


## Department of Information and Communication Engineering (GIC)

## Assignment9

Lab09 (function and file)

| | | |
|---|---|---|
| Lecturer | : | Bou Channa |
| Subject | : | Algorithms and Programming (TP) |


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|---|---|---|
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| Group | : | GIC-A |


2020~2021

70. C programming-Lab09 (function and file).c | 71. C programming-Lab09 (function and file).c | 72. C programming-Lab09 (function and file).c

```c
#include<stdio.h>
void storeDataInFile(char filename[]);
main(){
    char problem[30];
    printf("please Enter a file name(Example.txt): ");
    scanf("%s",&problem);
    storeDataInFile(problem);
}
void storeDataInFile(char filename[]){
    FILE *f;
    int n=2020;
    f=fopen(filename,"w");
    for(int i=1;i<=n;i++){
        fprintf(f,"%d\t",i);
        if(i%10==0){
            fprintf(f,"\n");
        }
    }
    fclose(f);
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\70. C programming-Lab09 (function and file).exe"
please Enter a file name(Example.txt): output-p1.txt

Process returned 0 (0x0)   execution time : 12.032 s
Press any key to continue.
```

70. C programming-Lab09 (function and file).c | 71. C programming-Lab09 (function and file).c | 72. C programming-Lab09 (function and file).c

```c
#include<stdio.h>
int sumDataInFile(char filename[]);
main(){
    char filename[30];
    printf("Please Enter a file name(Example.txt): ");
    scanf("%s",&filename);
    sumDataInFile(filename);
}
int sumDataInFile(char filename[]){
    FILE *f;
    int n,sum;
    f=fopen(filename,"r");
    while(fscanf(f,"%d",&n)!=EOF){
        printf("%d\t",n);
        if(n%10==0){
            printf("\n");
        }
        sum=sum+n;
    }
    fclose(f);
    printf("The summation of file %s equal to %d",filename,sum);
    return sum;
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\71. C programming-Lab09 (function and file).exe"
1951    1952    1953    1954    1955    1956    1957    1958    1959    1960
1961    1962    1963    1964    1965    1966    1967    1968    1969    1970
1971    1972    1973    1974    1975    1976    1977    1978    1979    1980
1981    1982    1983    1984    1985    1986    1987    1988    1989    1990
1991    1992    1993    1994    1995    1996    1997    1998    1999    2000
2001    2002    2003    2004    2005    2006    2007    2008    2009    2010
2011    2012    2013    2014    2015    2016    2017    2018    2019    2020
The summation of file output-p1.txt equal to 2041210
Process returned 0 (0x0)   execution time : 12.767 s
Press any key to continue.
```

70. C programming-Lab09 (function and file).c | 71. C programming-Lab09 (function and file).c | 72. C programming-Lab09 (function and file).c

```c
#include<stdio.h>
#include<time.h>

void getNstoreDataToFile();
main(){
    getNstoreDataToFile();
}
void getNstoreDataToFile(){
    int id[6],n;
    char name[6][30],tel[6][15];
    srand(time(0));
    int min=3, max=4;
    n=rand()%max+min;
    FILE *f;
    f=fopen("output-p3.txt","w");
    for(int i=0;i<=n;i++){
        printf("Enter student ID: ");
        scanf("%d",&id[i]);
        fprintf(f,"%d",id[i]);
        printf("Enter student name: ");
        scanf("%s",&name[i]);
        fprintf(f,"\t%s",name[i]);
        printf("Enter student phone number: ");
        scanf("%s",&tel[i]);
        fprintf(f,"\t\t%s",tel[i]);
        fprintf(f,"\n");
        printf("\n");
    }
    fclose(f);
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\72. C programmin
Enter student ID: 111
Enter student name: leap
Enter student phone number: 010183221

Enter student ID: 122
Enter student name: nha
Enter student phone number: 098977886

Enter student ID: 133
Enter student name: mutita
Enter student phone number: 012664723

Enter student ID: 144
Enter student name: kanhchakna
Enter student phone number: 0963242312

Enter student ID: 155
Enter student name: kha
Enter student phone number: 090565455
```

71. C programming-Lab09 (function and file).c | 72. C programming-Lab09 (function and file).c | 73. C rpogramming-Lab09 (function and file).c

```c
#include<stdio.h>
void getDataAndProcess();
main(){
    getDataAndProcess();
}
void getDataAndProcess(){
    int id[7],i=0;
    char name[7][30],tel[7][15];
    FILE *f;
    f=fopen("output-p3.txt","r");
    while(fscanf(f,"%d %s %s",&id[i],&name[i],&tel[i])!=EOF){
        printf("%d",id[i]);
        printf("\t%s",name[i]);
        printf("\t\t%s",tel[i]);
        printf("\n");
        i++;
    }
    fclose(f);
    printf("Enter student ID: "); scanf("%d",&id[i]);
    printf("Enter student name: "); scanf("%s",&name[i]);
    printf("Enter student phone number: "); scanf("%s",&tel[i]);
    f=fopen("output-p3.txt","w");
    for(int j=0;j<=i;j++){
        fprintf(f,"%d",id[j]);
        fprintf(f,"\t%s",name[j]);
        fprintf(f,"\t\t%s",tel[j]);
        fprintf(f,"\n");
    }
    fclose(f);
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\73. C rpogramming-Lab09 (fu
111     leap            010183221
122     nha             098977886
133     mutita          012664723
144     kanhchakna              0963242312
155     kha             090565455
Enter student ID: 166
Enter student name: chea
Enter student phone number: 092213123
```

Start here | 72. C programming-Lab09 (function and file).c | 73. C rpogramming-Lab09 (function and file).c | 74. C programming-Lab09 (function and file).c

```c
#include<stdio.h>
void generateDummyData();
main(){
    generateDummyData();
}
void generateDummyData(){
    int min=1,max=51;
    FILE *f[1000];
    for (int i=0;i<1000;i++){
        char filename[20];
        sprintf(filename, "data%d.txt",i+1);
        f[i]=fopen(filename,"w");
        for(int j=min;j<max;j++){
            fprintf(f[i],"%d ",j);
        }
        min=max;
        max=max+50;
    }
}
```