

**Computer Science 2**

**PW04 : C Files**

**Exercise 01 :**

Write a C program that generates a C file and include the following: I created the first C file in my life.

**Solution**

```
#include <stdio.h>
int main()
{
    FILE *fptr;
    fptr=fopen("file1.txt", "w");
    fprintf(fptr, " I created the first C file in my life." ) ;

    fclose(fptr);

    return 0;
}
```

**Exercise 02 :**

Write a C program that will read the C file generated in the previous exercise.

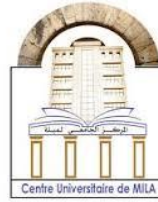
**Solution**

```
#include <stdio.h>
#include <stdlib.h>

int main()
{
    FILE *fptr;
    fptr=fopen("file1.txt", "r");
    if(fptr == NULL)
    {
        printf("unable to open");
    }
    else
    {
        char st[100];
        fgets(st, 100, fptr);
        printf("%s", st);
    }

    fclose(fptr);

    return 0;}
}
```



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**Exercise 03 :**

Write a C program that uses a function of your choice, which is defined in a header file.

**Solution**

We choose a function that gives the odd numbers from 0 to a. The function definition is done in a header file which is saved as **hfile1.h**. To use this file in a C main program, we should open another file by this name for example **prCfile.c** and in this file we will include the header file as follows :

Program in the header file	C main program	Output
<b>hfile1.h</b> <pre>#include &lt;stdio.h&gt; void odd(int a) {   int i;   for(i=0;i&lt;=a;i++)   {     if(i%2!=0)     {       printf("%d\n", i);     }   } }</pre>	<b>prCfile.c</b> <pre>#include &lt;stdio.h&gt; #include "hfile1.h" int main() {   int b=10;   printf("odd numbers from 1to%d:\n", b);   odd(b);   return 0; }</pre>	odd numbers from 1to10 : 1 3 5 7 9