Institute of Technology of Cambodia

Department of Information and Communication Engineering (GIC)

Assignment9

Lab08- Work with Function

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Subject	:	Algorithms and Programming (TP)

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66. C programming-Lab08- Work with Function.c | 67. C programming-Lab08- Work with Function.c | 68. C programming-Lab08- Work with Function.c

```c
#include<stdio.h>
#include<string.h>
void testIfExist(char s[50], char c);
main(){
    char cha;
    char string[50];
    printf("Enter a string: "); gets(string);
    printf("Enter a character: "); scanf("%c",&cha);
    testIfExist(string,cha);
}
void testIfExist(char s[50], char c){
    int n,status;
    n=strlen(s);
    for(int i=0;i<n;i++){
        if(s[i]==c){
            status=1;
            printf("The character %c exist in string %s",c,s);
            break;
        }
    }
    if(status!=1){
        printf("The character %c not exist in string %s",c,s);
    }
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\68. C programming-Lab08- W
Enter a string: hello world
Enter a character: l
The character l exist in string hello world
Process returned 0 (0x0)   execution time : 10.108 s
Press any key to continue.
```

66. C programming-Lab08- Work with Function.c | 67. C programming-Lab08- Work with Function.c | 68. C programming-Lab08- Work with Function.c

```c
#include<stdio.h>
#include<stdbool.h>
bool checkPrime(int n);
main(){
    int num;
    printf("Enter a number: ");scanf("%d",&num);
    checkPrime(num);
}
bool checkPrime(int n){
    bool status=true;
    for(int i=2;i<n;i++){
        if(n%i==0){
            status=false;
            break;
        }
    }
    if(status==true){
        printf("The number %d is primary number",n);
    }
    else{
        printf("The number %d is not primary number",n);
    }
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\67. C programming-Lab08- Work with F
Enter a number: 17
The number 17 is primary number
Process returned 0 (0x0)   execution time : 3.888 s
Press any key to continue.
```

66. C programming-Lab08- Work with Function.c | 67. C programming-Lab08- Work with Function.c | 68. C programming-Lab08- Work with Function.c

```c
#include<stdio.h>
long long findFactorial(int n);
long long computeSeries(int n);
main(){
    int n;
    long long total;
    printf("Enter a number: "); scanf("%d",&n);
    total=computeSeries(n);
    printf("The result of compute series is %lld",total);
}
long long computeSeries(int n){
    long long subresult=1,result,total=1;
    for(int i=2;i<=n;i++){
        subresult=subresult*i;
        result=subresult/i;
        total=total+result;
    }
    return total;
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\66. C programming-Lab08- Work with Fu
Enter a number: 5
The result of compute series is 34
Process returned 0 (0x0)   execution time : 7.263 s
Press any key to continue.
```

65. C programming-Lab08- Work with Function.c | 66. C programming-Lab08- Work with Function.c | 67. C programming-Lab08- Work with Function.c

```c
#include<stdio.h>
long long findFactorial(int n);

main(){
    int n;
    long long result;
    printf("Enter a number: "); scanf("%lld",&n);
    result=findFactorial(n);
    printf("The result of Factorial number is %lld",result);
}
long long findFactorial(int n){
    long long result=1;
    for(int i=2;i<=n;i++){
        result=result*i;
    }
    return result;
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\65. C programming-Lab08- Work with Function.exe"
Enter a number: 5
The result of Factorial number is 120
Process returned 0 (0x0)   execution time : 2.955 s
Press any key to continue.
```

64. C programming-Lab08- Work with Function.c | 65. C programming-Lab08- Work with Function.c | 66. C programming-Lab08- Work with Function.c

```c
#include<stdio.h>
void checkEvenOdd(int n);

main(){
    int n;
    printf("Enter a number: "); scanf("%d",&n);
    checkEvenOdd(n);
}

void checkEvenOdd(int n){
    if(n%2==0){
        printf("The number is Even");
    }
    else{
        printf("The number is Odd");
    }
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\64. C programming-Lab08- Work with Function.exe"
Enter a number: 10
The number is Even
Process returned 0 (0x0)   execution time : 3.869 s
Press any key to continue.
```