Institute of Technology of Cambodia

Department
of
Information and Communication
Engineering
(GIC)

Assignment5
Lab4-Work with Loop

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Subject : Algorithms and Programming (TP)

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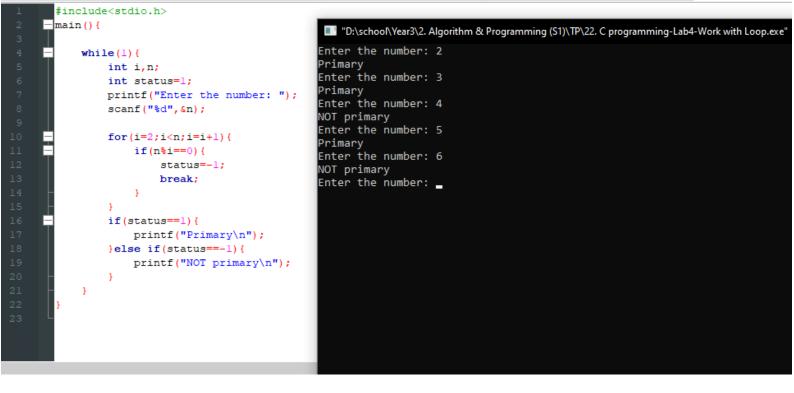
ID : e20180259

Group : GIC-A

2020~2021

```c
#include<stdio.h>
main(){
    int i,st,en,sum=0,mul=1;
    printf("Input the start number : ");
    scanf("%d",&st);
    printf("Input the end number : ");
    scanf("%d",&en);

    printf("The number is ");
    for(i=st;i<=en;i=i+1){
            printf("%d,",i);
        sum=sum+i;
        mul=mul*i;

    }
    printf("\n\tThe summation of the above number is: %d",sum);
    printf("\n\tThe multiplication of the above number is: %d",mul);

}
```

Console output:

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\19. C programming-Lab4-Work with Loop.exe"
Input the start number : 1
Input the end number : 10
The number is 1,2,3,4,5,6,7,8,9,10,
        The summation of the above number is: 55
        The multiplication of the above number is: 3628800
Process returned 0 (0x0)   execution time : 3.256 s
Press any key to continue.
```

```c
#include<stdio.h>
main(){
    int m,n,i,j;
    printf("Inout the start number : "); scanf("%d",&m);
    printf("Input the ent number :"); scanf("%d",&n);
    // for loop
    printf("For loop\n");
    for(i=m;i<=n;i=i+1){
        printf("%d ",i);
    }
    //while loop
    printf("\nWhile loop\n");
    i=m;
    while(i<=n){
        printf("%d ",i);
        i=i+1;
    }
    //do while loop
    printf("\nDo while loop\n");
    i=m;
    do{
        printf("%d ",i);
        i=i+1;
    }while(i<=n);
}
```

Console output:

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\20. C programming-Lab4-Work with Loop.exe"
Inout the start number : 1
Input the ent number :10
For loop
1 2 3 4 5 6 7 8 9 10
While loop
1 2 3 4 5 6 7 8 9 10
Do while loop
1 2 3 4 5 6 7 8 9 10
Process returned 0 (0x0)   execution time : 21.487 s
Press any key to continue.
```

```c
#include<stdio.h>
#include<time.h>
main(){
    int n,i=1;
        srand(time(0));
    int min=10, max=10000;
    while(i<=10){

    n=rand()%max+min;
    printf("%d ",n);
    i=i+1;
    }

}
```

```
 "D:\school\Year3\2. Algorithm & Programming (S1)\TP\21. C programming-Lab4-Work with Loop.exe"
488 127 833 443 1937 9748 2187 4308 2702 6579
Process returned 0 (0x0)   execution time : 0.107 s
Press any key to continue.
```

```c
#include<stdio.h>
main(){

    while(1){
        int i,n;
        int status=1;
        printf("Enter the number: ");
        scanf("%d",&n);

        for(i=2;i<n;i=i+1){
            if(n%i==0){
                status=-1;
                break;
            }
        }
        if(status==1){
            printf("Primary\n");
        }else if(status==-1){
            printf("NOT primary\n");
        }
    }
}
```

```
 "D:\school\Year3\2. Algorithm & Programming (S1)\TP\22. C programming-Lab4-Work with Loop.exe"
Enter the number: 2
Primary
Enter the number: 3
Primary
Enter the number: 4
NOT primary
Enter the number: 5
Primary
Enter the number: 6
NOT primary
Enter the number: _
```

```c
#include<stdio.h>
main(){
    int i,n,max=0;
    for(i=1;i<=10;i=i+1){
        printf("Enter the number: ");
        scanf("%d",&n);
        if(max<n){
            max=n;
        }
    }
    printf("The max number is %d.",max);
}
```

```
"D:\school\Year3\2. Algorithm & Programming (S1)\TP\23. C programming-Lab4-Work with Loop.exe"
Enter the number: 39
Enter the number: 50
Enter the number: 26
Enter the number: 29
Enter the number: 34
Enter the number: 49
Enter the number: 38
Enter the number: 40
Enter the number: 48
Enter the number: 52
The max number is 52.
Process returned 0 (0x0)   execution time : 16.129 s
Press any key to continue.
```