## Institute of Technology of Cambodia



Information and Communication Engineering (GIC)

Assignment4
Lab3- Working with IF syntax

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Subject : Algorithms and Programming (TP)

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```
Start here X 18. C programming.c X 17. C programming.c X *16. C programming.c X 15. C programming.c X 14. C programming.c X
            #include<stdio.h>
     1
     2
          main(){
     3
                int nl;
     4
                printf("Input a number: ");
     5
                scanf("%d", &n1);
     6
                if (n1>0) {
     7
                    printf("The number is positive.");
     8
     9
                else if (n1==0) {
    10
                    printf("The number Zero is neutral number.");
    11
    12
                else{
                    printf("The number is negative.");
    13
    14
                     "D:\school\Year3\2. Algorithm & Programming S1\TP\14. C programming.exe"
    15
    16
                    Input a number : 6
    17
            }
                    The number is positive.
    18
                    Process returned 0 (0x0)
                                                 execution time : 5.085 s
                    Press any key to continue.
            18. C programming.c × 17. C programming.c × *16. C programming.c × 15. C programming.c ×
Start here X
       1
               #include<stdio.h>
       2
            main() {
       3
                    int num;
       4
                    printf("Enter a number : ");
       5
                    scanf ("%d", &num);
```

```
6
            if (num%2==0) {
 7
                printf("The number is even");
 8
            }
 9
     10
            else if (num==0) {
11
                printf("The number is Zero");
12
            }
13
     else{
14
                printf("The number is odd");
15
16
                "D:\school\Year3\2. Algorithm & Programming S1\TP\15. C programming.exe"
17
       }
               Enter a number : 7
18
               The number is odd
                                            execution time : 1.294 s
               Process returned 0 (0x0)
               Press any key to continue.
```

```
Start here X 18. C programming.c X 17. C programming.c X *16. C programming.c X
      1
             #include<stdio.h>
      2
          -main(){
      3
                 int n1, n2, n3, n4, n5, n6, n7, min;
      4
                 printf("Enter the first number: "); scanf("%d",&nl);
                 printf("Enter the second number: "); scanf("%d", &n2);
      5
                 printf("Enter the third number: "); scanf("%d",&n3);
      6
      7
                 printf("Enter the fourth number : "); scanf("%d", &n4);
                 printf("Enter the fifth number: "); scanf("%d",&n5);
      8
      9
                 printf("Enter the sixth number: "); scanf("%d", &n6);
    10
                 printf("Enter the seventh number: "); scanf("%d",&n7);
    11
                 min=n1;
                 if (min>n2) {
    12
                                       "D:\school\Year3\2. Algorithm & Programming S1\TP\16. C programming.exe"
    13
                     min=n2:
                                   Enter the first number : 1
    14
                                   Enter the second number : 2
    15
                 if (min>n3) {
                                   Enter the third number : 3
    16
                     min=n3;
                                   Enter the fourth number : 4
    17
                 1
                                   Enter the fifth number : 5
     18
                 if (min>n4) {
                                   Enter the sixth number : 6
    19
                     min=n4;
                                   Enter the seventh number : 7
    20
                                   The minimum number is 1.
    21
                 if (min>n5) {
                                   Process returned 0 (0x0)
                                                                 execution time : 27.152 s
    22
                     min=n5;
                                   Press any key to continue.
    23
                 if (min>n6) {
    24
    25
                     min=n6;
    26
    27
                 if (min>n7) {
    28
                     min=n7:
    29
    30
    31
                 printf("The minimum number is %d.", min);
    32
            }
Start here X 18. C programming.c X 17. C programming.c X *16. C programming.c X 15. C programming.c X 14. C programming.c X
     1
            #include<stdio.h>
     2
            #include<math.h>
     3
          __main() {
     4
                float a,b,c,d,x1,x2;
                printf("Input a : "); scanf("%f",&a);
     5
                printf("Input b : "); scanf("%f",&b);
     6
                printf("Input c : "); scanf("%f",&c);
     7
     8
                d=pow(b,2)-4*a*c;
     9
                if (d>0) {
    10
                    xl=(-b+sqrt(d))/(2*a);
    11
                    x2=(-b-sqrt(d))/(2*a);
    12
                    printf("The equation has root: x1=%.3f and x2=%.3f",x1,x2);
    13
                else if (d==0) {
    14
    15
                    x1=-b/(2*a);
    16
                    printf("The equation has root: x1=x2=%.3f",x1);
    17
                1
    18
                else{
    19
                    printf("The equation has no root.");
    20
                }
                     "D:\school\Year3\2. Algorithm & Programming S1\TP\17. C programming.exe"
    21
    22
                    Input a : 1
    23
           }
                    Input b : 3
    24
                    Input c : 2
                    The equation has root: x1=-1.000 and x2=-2.000
                    Process returned 0 (0x0)
                                                execution time : 4.563 s
                    Press any key to continue.
```

```
Start here X 18. C programming.c X 17. C programming.c X *16. C programming.c X 15. C programming.c X 14. C programming.c X
           #include<stdio.h>
     2
          main() {
     3
               char gender;
                char name[20];
     4
     5
                float salary, tax;
     6
     7
                printf("Input your gender(M/F) : "); scanf("%c", @gender);
                printf("Input your name : "); scanf("%s", &name);
     8
     9
                printf("Input your salary($) : "); scanf("%f", &salary);
    10
                if (gender=='M'|gender=='m') {
    11
                    if (salary>300) {
    12
                                                         "D:\school\Year3\2. Algorithm & Programming S1\TP\18...
                                                                                                                    13
                        tax=(salary/100.0)*10;
                                                       Input your gender(M/F) : F
Input your name : Dara
Input your salary($) : 280
    14
    15
                    else if (salary>=200) {
    16
                        tax=(salary/100.0)*5;
    17
    18
                    else {
                                                        Hi Dara, based on your given information, the tax salary
    19
                        tax=0;
                                                        that you need to pay is: 8.40 USD.
    20
                                                        Process returned 0 (0x0)
                                                                                        execution time : 10.082 s
    21
                                                        Press any key to continue.
         自
    22
                else if (gender=='F'|gender=='f') {
    23
                    if (salary>300) {
    24
                        tax=(salary/100.0) *5;
    25
    26
                    else if (salary>=250) {
                        tax=(salary/100.0) *3;
    27
    28
    29
                    else {
    30
                        tax=0;
    31
    32
                printf("\nHi %s, based on your given information, the tax salary that you need to pay is: %.2f USD.",name,tax);
    33
    34
```