Bangladesh Army University of Engineering & Technology (BAUET)

Qadirabad Cantonment, Natore-6431



Assignment

Course Code: CSE-1214

Course Title: Structured Programming Sessional

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```
X *p15.c X p1.c X p2.c X p3.c X p4.c X p5.c X p6.c X p7.c 3
1
   #include<stdio.h>
    #include<string.h>
2
3
    int main()
   □ {
4
5
        char a[100], i=0;
6
        gets(a);
7
        while (a[i]!='\0') {
8
                i++;
9
        printf("%d",i);
0
1
         return 0;
2
3
                C:\Users\LENOVO\AppData\L ×
               Tamima
               6
              Process returned 0 (0x0) execu
              Press any key to continue.
```

```
#include<stdio.h>
      #include<string.h>
                                    C:\Users\LENOVO\AppData\L
3
      int main()
 4
                                   Tamima Azad
 5
          char a[100];
 6
          int i=0, j=0;
                                   Process returned 0 (0
7
          gets(a);
8
                                   Press any key to cont
          while (a[i]!='\0') {
9
                  if(a[i]==' '){
10
                      j++;
11
12
                  i++;
13
14
          printf("%d",j+1);
15
          return 0;
16
17
18
```

```
#include<stdio.h>
1
2
    int main()
3
  □ {
4
         int a,b;
         scanf("%d %d", &a, &b);
5
6
        a^=b^=a^=b;
7
        printf("%d %d",a,b);
8
    }
9
        © C:\Users\LENOVO\AppData\L∈×
       11
       99
       99 11
       Process returned 0 (0x0) execution t
       Press any key to continue.
```

```
#include<stdio.h>
2
    int main()
3 ⊟{
4
        int a,b,m;
5
        scanf("%d %d", &a, &b);
6
        m=(a>b)?a:b;
7
        printf("%d",m);
8
    }
9
    © C:\Users\LENOVO\AppData\L∈×
                                  + -
  21
  81
  81
  Process returned 0 (0x0) execution time
  Press any key to continue.
```

```
#include<stdio.h>
2
    int main()
3
   □ {
        int y;
        scanf("%d", &y);
5
6
        (y%4==0)?(y%100!=0)?printf("leap year")
7
            :(y%400==0)?printf("leap year")
8
         :printf("not leap year"):printf("not leap year");
9
0
       © C:\Users\LENOVO\AppData\L ×
     2028
     leap year
     Process returned 0 (0x0) execution time: 4.829 s
     Press any key to continue.
```

```
#include<stdio.h>
1
2
     int main()
3
   \square {
4
         int a,b;
5
         scanf("%d %d", &a, &b);
6
         (a>b) ?printf("%d is maximum ",a)
         :printf("%d is maximum",b);
7
8
        C:\Users\LENOVO\AppData\L ×
                                        +
       11
       89
       89 is maximum
       Process returned 0 (0x0) execution
       Press any key to continue.
```

```
X *p15.c X p1.c X p2.c X p3.c X p4.c X p5.c X p6.c X p7.c X p8.c X r
   #include<stdio.h>
   int main()
  □ {
       int a,b,c,max;
       scanf("%d %d %d", &a, &b, &c);
       max=(a>b)?((a>c)?a:c):(b>c?b:c);
       printf("%d is max", max);
                                     + ~
       © C:\Users\LENOVO\AppData\L∈×
      36
      47
      98
      98 is max
      Process returned 0 (0x0) execution time : 9
      Press any key to continue.
```

```
#include<stdio.h>
int main()

{
   int num;
   scanf("%d",&num);
   (num%2==0)?printf("%d is even",num)
   :printf("%d is odd",num);
}

C:\Users\LENOVO\AppData\L; × + \

65
   65 is odd
Process returned 0 (0x0) execution time
Press any key to continue.
```

```
#include<stdio.h>
int main()

{
    char a;
    scanf("%c",&a);
    (a>=65&&a<=122)?printf("%c is alphabet",a)
    :printf("%c is not alphabet",a);
}

C:\Users\LENOVO\AppData\L \times + \times

A
    A is alphabet
    Process returned 0 (0x0) execution ti
    Press any key to continue.
```

```
#include<stdio.h>
2
     #include<string.h>
3
     int main()
4
   □ {
                                                 ©\ "D:\Lab 9\p10.exe"
5
         int n;
6
         scanf("%d", &n);
                                               3
7
         char a[n+1][100],b[100];
                                                Java
8
         for(int i=0; i<=n; i++ )</pre>
                                                Python
9
0
                                               C Programming
             gets(a[i]);
1
2
         for(int i=0; i<=n; i++) {</pre>
                                               C Programming
3
            for(int j=i; j<=n; j++) {</pre>
                                               Java
4
                  if(strcmp(a[i],a[j])>0){
5
                                                Python
                      strcpy(b,a[i]);
6
                      strcpy(a[i],a[j]);
7
                      strcpy(a[j],b);
                                                Process returned 0 (0x0)
8
                                                Press any key to continue.
9
0
1
              for(int i=0; i<=n; i++) {</pre>
2
             puts(a[i]);}
3
```

```
#include<stdio.h>
                                            "C:\Users\LENOVO\OneDrive\
2
     int main()
3
   □ {
                                           Enter a decimal no:56
4
         int n, n1, s=0, b=0, d=0;
                                           Binary=111000
5
         printf("Enter a decimal no:");
                                           Decimal=56
6
         scanf("%d", &n);
7
         n1=n;
                                           Process returned 0 (0x0)
8
         while (n>0) {
                                           Press any key to continue
9
             n=n/2;
0
             s++;
1
2
         for(int i=0;i<s;i++) {</pre>
3
         b=b+((n1>>i) &1)*pow(10,i);
4
5
         printf("Binary=%d\n",b);
6
7
         for(int i=0;i<s;i++){</pre>
8
             d=d+((n1>>i) &1)*pow(2,i);
9
0
         printf("Decimal=%d",d);
1
2
3
```

```
#include<stdio.h>
 int main()
-] {
    int n,m;
    printf("Enter Decimal Number = ");
    scanf("%d", &n);
    printf("Hexa-Decimal = %x\n",n);
    printf("Enter Hexa-Decimal Number = ");
    scanf("%x", &m);
    printf("Decimal = %d",m);
       "C:\Users\LENOVO\OneDrive\ X
      Enter Decimal Number = 98
      Hexa-Decimal = 62
      Enter Hexa-Decimal Number = 24
      Decimal = 36
      Process returned 0 (0x0) execution to
      Press any key to continue.
```

```
#include<stdio.h>
int main()
   int n,m;
   printf("Enter Hexa-Decimal Number = ");
   scanf("%x",&n);
   printf("Octal = %o\n", n);
   printf("Enter Octal Number = ");
   scanf("%o", &m);
   printf("Hexa-Decimal = %x",m);
   "C:\Users\LENOVO\OneDrive\ X
  Enter Hexa-Decimal Number = C7
  Octal = 307
  Enter Octal Number = 356
  Hexa-Decimal = ee
  Process returned 0 (0x0) execution time
  Press any key to continue.
```

```
#include<stdio.h>
∃int main() {
  long int b, h = 0, i = 1, r;
  printf("Enter the binary number: ");
  scanf("%ld", &b);
  while (b != 0) {
    r = b % 10;
    h = h + r* i;
    i = i * 2;
    b = b / 10;
  printf("Equivalent hexadecimal value: %1X", h);
  return 0;
       "C:\Users\LENOVO\OneDrive\ X
      Enter the binary number: 110011
      Equivalent hexadecimal value: 33
      Process returned 0 (0x0) execution time
      Press any key to continue.
```

```
#include <stdio.h>
 int findOddOccuring(int arr[], int n)
     int xor = 0;
     for (int i = 0; i < n; i++) {</pre>
        xor = xor ^ arr[i];
     return xor;
 int main()
□ {
     int arr[] = { 4, 3, 6, 2, 6, 4, 2, 3, 4, 3, 3 };
     int n = sizeof(arr) / sizeof(arr[0]);
     printf("The odd occurring element is %d", findOddOccuring(arr, n));
     return 0;
    © "C:\Users\LENOVO\OneDrive\ ×
                                 + ~
   The odd occurring element is 4
   Process returned 0 (0x0) execution time : 0.047 s
   Press any key to continue.
```