

## Program # 22

**Program's objective: To show name character in backward position.**

**Theme given by: Programming book.**

**Solution code by: Programming book.**

**Program name: NAMEME.C**

### Source Code

```
#include<stdio.h>
#include<conio.h>
#include<dos.h>

#define NAME 80

void main()
{
    char ch, name[NAME];
    int i;
    clrscr();
    printf("Hello! Please type your name:\n");
    for( i=0; (ch=getchar()) != '\n'; ++i)
    {
        name[i]=ch;
    }
    printf("\n %s %s %s", "Nice to meet u", name, ".");
    sleep(1);
    printf("\n Your name spell backward is:\n ");
    for( --i; i>=0; --i)
    {
        putchar(name[i]);
    }
    printf("\n\n Have a nice day.....\a\a\a");
    sleep(5);
}
```

### Output

**Hello! Please type your name:**

**Mizan**

**Nice to meet u , Mizan.**

**Your name spell backward is:**

**naziM**

**Have a nice day.....(program exit automatically after sometime)**

8 8 8

## **Program # 23**

**Program's objective: To show row & column multiplication (Using While loop).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Emrul Yasir.**

**Program name: USTCWHIL.C**

### **Source Code**

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

void main()
{
    int row,column,y;
    clrscr();
    {
        row=1;
        do{
            column=1;
            do{
                y=row*column;
                printf("\t%d",y);
                column++;
            }while(column<=4);
            printf("\n");
            row++;
        }while(row<=3);
    }
    getch();
}
```

### **Output:**

```
1   2   3   4
2   4   6   8
3   6   9  12
```

8 8 8

## **Program # 24**

**Program's objective: To show rate for talk time in Aktel Network (10 second pulse system) (Using library function math).**

**Theme given by: Tarek.**

**Solution code by: (Tarek+ Sukanto+ Mizan).**

**Program name: PULSE.C**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
#include<math.h>
void main()
{
    int a,b,g;
    float c,e,t,v;
    clrscr();
    printf("Put minute :");
    scanf("%d",&a);
    printf("Put second :");
    scanf("%d",&b);
    c=(a*60+b);
    e=(c/10);
    g=ceil(e);
    scanf("%.f",g);
    t=g*1;
    v=g*1.15;
    printf("Price without vat: %.2f",t);
    printf("\n\nPrice with vat: %.2f",v);
    getch();
}
```

### **Output:**

**Put minute: 1**  
**Put second: 40**  
**Price without vat: 10**  
**Price with vat: 11.50**

8 8 8

## **Program # 25**

**Program's objective: To show continuous addition of given number(using for loop).**

**Theme given by: Book.**

**Solution code by: Mizanur Rahaman Mizan.**

**Program name: 1.C**

### **Source Code**

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

void main()
{
    long int sum,i,n;
    clrscr();
    printf("Put the number to be added continuously:\n");
    scanf("%ld",&n);
    printf("\nresult is:\n");
    {
        sum=0;
        for(i=1;i<=n;i++)
        {
            printf("%ld",sum);
            printf("==");
            sum+=i;
        }
        printf("%ld",sum);
    }
    printf("\nAnswer is :\n%ld",sum);
    getch();
}
```

### **Output:**

**Put the number to be added continuously:**

**5**

**0==1==3==6==10==15**

**Answer is:**

**15**

8 8 8

## **Program # 26**

**Program's objective: To show Namta of an inputted value (using for loop).**

**Theme given by: Mizanur Rahaman Mizan.**

**Solution code by: Md. Tarek Mahmud.**

**Program name: NAMTA.CPP**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int n,r,m;
    clrscr();
    printf("Which value?\n");
    scanf("%d",&n);
    for(r=1;r<=10;r++)
    {

        printf("\n%4d",n);
        printf(" *");
        printf(" %d",r);
        printf(" =");
        m=n*r;
        printf("%d\n\n",m);
    }
    printf("THANKS FOR USING ME");
    getch();
}
```

### **Output:**

**Which value?**

**2**

**2\*1=2**

**2\*2=4**

**2\*3=6**

**2\*4=8**

**2\*5=10**

**2\*6=12**

**2\*7=14**

**2\*8=16**

**2\*9=18**

**2\*10=20**

**THANKS FOR USING ME**

8 8 8

## **Program # 27**

**Program's objective: To show a triangle with numerical value (using for loop).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Sukanto Paul.**

**Program name: MMSSTT.C**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int r,c,m,y,n;
    clrscr();
    printf("\n\nHow many numbers of n do you want? Please give\n");
    scanf("%d",&n);
    for(m=1;m<=n;m++)
    for(r=1;r<=m;r++)
    {
        for(c=1;c<=m;c++)
        {
            y=r*c;
            printf("%d",y);
        }
        printf("\n");
    }
    getch();
}
```

### **Output:**

**How many numbers of n do you want? Please give**

**5**

**1**

**12**

**123**

**1234**

**12345**

8 8 8

## **Program # 28**

**Program's objective: To show Diagonal Matrix.**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Tarek Mahmud.**

**Program name: CMATRIX.CPP**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,j,n;
    clrscr();
    printf("How many rows\n");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        for(j=0;j<n;j++)
        {
            if(i==j)
                printf(" 1");
            else
                printf(" 0");
        }
        printf("\n\n");
    }
    getch();
}
```

### **Output:**

**How many rows**

**5**

**10000**

**01000**

**00100**

**00010**

**00001**

8 8 8

## **Program # 29**

**Program's objective: To show Diagonal Matrix.**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Tarek Mahmud.**

**Program name: SEARCHIN.CPP**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
void main()
{
int n,i,m=0;
int a[5]={5,12,2,1,4};
clrscr();
printf("Put a number:\n");
scanf("%d",&n);
for(i=0;i<5;i++)
{
    if(n==a[i])
    printf("Successful");
    else
    m=m+1;
    if(m==5)
    printf("FALURE");
}
getch();
}
```

### **Output:**

**Put a number:**

**5**

**Successful**

8 8 8



## **Program # 30**

**Program's objective: To show Lowercase letter to uppercase letter.**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Mizanur Rahaman Mizan.**

**Program name: LTOUP.CPP**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
void main()
{
    char letter[80];
    int count,tag;
    clrscr();
    printf("Write a sentence:\n");
    for(count=0;(letter[count]=getchar())!='\n';++count)
    tag=count;
    for(count=0;count<=tag;count++)
    putchar(toupper(letter[count]));
    getch();
}
```

### **Output:**

**Write a sentence:**  
**Sukanto paul**  
**SUKANTO PAUL**

8 8 8

## Program # 31

**Program's objective: To show ex series (Using Function).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Sir Mr. Md. Shahedul Islam.**

**Program name: E^X.CPP**

### Source Code

```
#include<stdio.h>
#include<conio.h>
float power(int x,int y)
{
    float i,p=1;
    for(i=1;i<=y;i++)
        p=p*x;
    return(p);
}
int fact(int n)
{
    int i,f=1;
    if(n<=1)
        return 1;
    else {for(i=1;i<=n;i++)
        f=f*i;
    return(f);
}
}
int main()
{
    int i,n;
    float r,sum=1.0;
    clrscr();
    printf("Enter an integer value:\n");
    scanf("%d",&n);
    printf("Enter an integer number:\n");
    scanf("%d",&r);
    for(i=1;i<=n;i++)
    {
        sum=sum+power(n,i)/fact(i);
    }
    printf("\n1+x/i!+x^2/2!+x^3/3!+...=%.2f",sum);
    getch();
    return(0);
}
```

### Output:

**Enter an integer value:**

**5**

**Enter an integer number:**

**2**

**1+x/i!+x^2/2!+x^3/3!+...= 91.42**

8 8 8

## Program # 32

**Program's objective: To show  $x+x^2/2!+x^4/4!+\dots+x^N/n!$  (Using Function).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Sir Mr. Md. Shahedul Islam.**

**Program name: FACT1.CPP**

### Source Code

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

float power(float p,int q)
{
    int i;float s=1.0;
    clrscr();
    if(q==0)
        return(p);
    else
        for(i=0;i<q;i++)
            s=s*p;
    return(s);
}
long fact(int n)
{
    int i,f=1;
    if(n<=1)
        return(1);
    else
    {
        for(i=1;i<=n;i++)
            f=f*i;
        return(f);
    }
}
void main()
{
    clrscr();
    int i,n;float x,sum=0.0;
    scanf("%f%d",&x,&n);
    for(i=0;i<=n;i=i+2)
    {
        sum=sum+(power(x,i)/fact(i));
    }
    printf("\nx+x2/2!+x4/4!+\dots+xN/n!=%.2f",sum);
    getch();
}
5
2
x+x2/2!+x4/4!+\dots+xN/n!=12.50
```

### Output:

8 8 8

## **Program # 33**

**Program's objective: To show decreasing triangle (Using loop).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Mizanur Rahaman Mizan**

**Program name: MDECRE.CPP**

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int r,c,m,y,n;
    clrscr();
    printf("\n\nHow many numbers of n do you want? Please give\n");
    scanf("%d",&n);
    for(m=n;m>=1;m--)
    for(r=1;r<=m;r++)
    {
        for(c=m;c>=1;c--)
        {
            y=r*c;
            printf("%d",y);
        }
        printf("\n");
    }
    getch();
}
```

### **Output:**

**How many numbers of n do you want? Please give**

**5**

**54321**

**4321**

**321**

**21**

**1**

8 8 8

## **Program # 34**

**Program's objective: To show Matrix Multiplication (Using array).**

**Theme given by: Sir Mr. Md. Shahedul Islam.**

**Solution code by: Mizanur Rahaman Mizan**

**Program name: MRMMAT.CPP**

### **Source Code**

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

void main()
{
    int matrix1[3][3];
    int matrix2[3][3];
    int matrix3[3][3];
    int i,j,k,sum;
    clrscr();
    printf("Enter Matrix A:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        scanf("%d",&matrix1[i][j]);
    }
    printf("Enter Matrix B:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        scanf("%d",&matrix2[i][j]);
    }
    printf(" A:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        printf("%d",matrix1[i][j]);
        printf("\n");
    }
    printf(" B:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        printf("%d",matrix2[i][j]);
        printf("\n");
    }
    printf("Multiplication of Matrix A & B is:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        {
            sum=0;
```

*Assignment of Structured Programming Language*

```
        for(k=0;k<3;k++)
        sum=sum+matrix1[i][k]*matrix2[k][i];
        matrix3[i][j]=sum;
        printf("%d\t",matrix3[i][j]);
        }
        printf("\n");
        }
        getch();
}
```

**Output:**

**Enter Matrix A:**

1  
2  
3  
4  
5  
6  
7  
8  
9

**Enter Matrix B:**

1  
2  
3  
4  
5  
6  
7  
8  
9

**A:**

123  
456  
789

**B:**

123  
456  
789

**Multiplication of Matrix A & B is:**

30 30 30  
81 81 81  
150 150 150

8 8 8

## **Program # 35**

**Program's objective: To make Matrix Addition (Using array).**

**Theme given by: Mr. Md. Shahedul Islam Sir.**

**Solution code by: Mizanur Rahaman Mizan.**

**Program name: MATMRMAD.CPP**

### **Source Code**

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

void main()
{
    int matrix1[3][3];
    int matrix2[3][3];
    int matrix3[3][3];
    int i,j,k,sum;
    clrscr();
    printf("Enter Matrix A:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        scanf("%d",&matrix1[i][j]);
    }
    printf("Enter Matrix B:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        scanf("%d",&matrix2[i][j]);
    }
    printf(" A:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        printf("%d",matrix1[i][j]);
        printf("\n");
    }
    printf(" B:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        printf("%d",matrix2[i][j]);
        printf("\n");
    }
    printf("Addition of Matrix A & B is:\n");
    for(i=0;i<3;i++)
    {
        for(j=0;j<3;j++)
        {
            sum=0;
```

*Assignment of Structured Programming Language*

```
        sum=sum+matrix1[i][j]+matrix2[i][j];
        matrix3[i][j]=sum;
        printf("%d\t",matrix3[i][j]);
    }
    printf("\n");
}

    getch();
}
```

**Output**

**Enter Matrix A:**

1  
2  
3  
4  
5  
6  
7  
8  
9

**Enter Matrix B:**

1  
2  
3  
4  
5  
6  
7  
8  
9

**A:**

123  
456  
789

**B:**

123  
456  
789

**Addition of Matrix A & B is:**

2	4	6
8	10	12
14	16	18

8 8 8



## **Program # 36**

**Program's objective:** To show the number of vowel, consonant, digit etc in a sentence.

**Theme given by:** Mr. Md. Shahedul Islam Sir.

**Solution code by:** Mizanur Rahaman Mizan.

**Program name:** VCDWOTH.C

### **Source Code**

```
#include<stdio.h>
#include<conio.h>
#include<ctype.h>
#include<string.h>
void main()
{
    int i,v,c,d,w,o,lenth;
    char string[80],charac;
    i=v=c=d=w=o=0;
    clrscr();
    printf("Type a Line:\n");
    gets(string);

    while((charac=tolower(string[i++]))!='\0')
    {
        if((charac=='a')||(charac=='e')||(charac=='i')||(charac=='o')||(charac=='u'))
            v++;
        else
            if((charac>'a' && charac<'e')||(charac>'e' && charac<'i')||(charac>'i' &&
charac<'o')||(charac>'o' && charac<'u')||(charac>'u' ))
                c++;
            else
                if(charac>='0'&&charac<='9')
                    d++;
                else
                    if(charac==' ')
                        w++;
                    else
                        o++;
            }
        w++;

        printf("Vowel number is: %d",v);
        printf("\nConsonant number is:%d",c);
        printf("\nDigit number is:%d",d);
        printf("\nWord number is:%d",w);
        printf("\nOthers: %d",o);
        getch();
    }
}
```

### **Output**

**Type a Line:**

*Assignment of Structured Programming Language*

**Mizanur Rahaman Mizan**

**Vowel number is: 8**

**Consonant number is: 11**

**Digit number is: 0**

**Word number is: 3**

**Others: 0**

8 8 8

## **Program # 37**

**Program's objective: To show Judaic of a person.**

**Theme given by: Mizanur Rahaman Mizan.**

**Solution code by: Mizanur Rahaman Mizan.**

**With the help of: Triangle (Sukanto + Tarek)**

**Program name: RASHICOR.C**

### **Source Code**

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

/*this is a program that inform about Zodiac*/
/*Concept of this program by Mizanur Rahaman Mizan*/
/*This program is solved by the Triangle Programming Group*/
/*this program's SOLUTION CODE is given by Mizanur Rahaman Mizan*/
/*This code is checked by The Triangle Programming Group*/
/*this program is tested by many people*/

void main()
{
    int date,month;
    clrscr();
    textcolor(RED);
    printf("\n\nPut your date of birth:\n");
    scanf("%d",&date);
    printf("\n\nPut your month of birth:\n");
    scanf("%d",&month);
    printf("Result:\n");
    if( ((date>=20)&&(date<=31)&&(month==1)) || ((date<=18)&&(month==2)) )
    {
        printf("Your Zodiac is Kumvo.");
    }
    if( ((date>=19)&&(month==2)&&(date<=29)&&(month==2)) ||
((date<=20)&&(month==3)) )
    {
        printf("Your Zodiac is Mean.");
    }
    if( ((date>=21)&&(month==3)&&(date<=31)&&(month==3)) ||
((date<=20)&&(month==4)) )
    {
        printf("Your Zodiac is Mesh.");
    }
    if( ((date>=21)&&(month==4)&&(date<=30)&&(month==4)) ||
((date<=20)&&(month==5)) )
    {
        printf("Your Zodiac is Brish.");
    }
    if( ((date>=21)&&(month==5)&&(date<=31)&&(month==5)) ||
((date<=20)&&(month==6)) )
    {
```

```
printf("Your Zodiac is Mithun.");
}
if( ((date>=21)&&(month==6)&&(date<=30)&&(month==6)) ||
((date<=21)&&(month==7)) )
{
printf("Your Zodiac is Korkot.");
}
if( ((date>=22)&&(month==7)&&(date<=31)&&(month==7)) ||
((date<=21)&&(month==8)) )
{
printf("Your Zodiac is Singho.");
}
if( ((date>=22)&&(month==8)&&(date<=31)&&(month==8)) ||
((date<=21)&&(month==9)) )
{
printf("Your Zodiac is Konna.");
}
if( ((date>=22)&&(month==9)&&(date<=30)&&(month==9)) ||
((date<=22)&&(month==10)) )
{
printf("Your Zodiac is Tula.");
}
if( ((date>=23)&&(month==10)&&(date<=31)&&(month==10)) ||
((date<=21)&&(month==11)) )
{
printf("Your Zodiac is Brishchick.");
}
if( ((date>=22)&&(month==11)&&(date<=30)&&(month==11)) ||
((date<=20)&&(month==12)) )
{
printf("Your Zodiac is Dhonu.");
}
if( ((date>=21)&&(month==12)&&(date<=31)&&(month==12)) ||
((date<=19)&&(month==1)) )
{
printf("Your Zodiac is Moker.");
}
else
if( ( (date>=32)|| (month>=13) ) || ( (date>=30)&&(month==2) ) || (
(date>30)&&(month==4) ) || ( (date>30)&&(month==6) ) || ( (date>30)&&(month==9) ) || (
(date>30)&&(month==11) ) ) )
{
cprintf("\n\aBe serious man\! You make a silly mistake.");
}
getch();
}
```

**Output:**

**Put your Date of birth:**

**12**

**Put your month of birth:**

**13**

**Result:**

**Be serious man! You make a silly mistake.**

8 8 8