

## Assignment 18

1. Write a program which accept number from user and display below pattern

Input : 987

Output :

9 8 7

9 8 7

9 8 7

```
#include<stdio.h>
void Pattern(int iNo);
int main()
{
    int no = 0;
    printf("Enter the Number\n");
    scanf("%d", &no);
    Pattern(no);

    return 0;
}
void Pattern(int iNo)
{
    int i = 0, j = 0, idigit = 0, icnt=0, rev=0, n=0, temp=0;
    while (iNo != 0)
    {
        icnt++;
        idigit = iNo % 10;
        rev = rev * 10 + idigit;
        iNo = iNo / 10;
    }
    temp = rev;
    for (i = 1; i <= icnt; i++)
    {
        for (j = 1; j <= icnt; j++)
        {
            while (rev != 0)
            {
                n = rev % 10;
                printf("%d\t", n);
                rev = rev / 10;
            }

            rev = temp;
            printf("\n");
        }
    }
}
```

2. Write a program which accept number from user and display below pattern

Input : 9871

Output :

1 7 8 9

1 7 8 9

1 7 8 9

1 7 8 9

```
#include<stdio.h>
void Pattern(int iNo);
int main()
{
    int no = 0;
    printf("Enter the Number\n");
    scanf("%d", &no);
    Pattern(no);

    return 0;
}
void Pattern(int iNo)
{
    int i = 0, j = 0, idigit = 0, icnt = 0, temp = 0;
    temp = iNo;

    while (iNo != 0)
    {
        icnt++;
        idigit = iNo % 10;
        iNo = iNo / 10;
    }
    iNo = temp;
    for (i = 1; i <= icnt; i++)
    {
        for (j = 1; j <= icnt; j++)
        {
            while (iNo != 0)
            {
                idigit = iNo % 10;
                printf("%d\t", idigit);
                iNo = iNo / 10;
            }

            iNo = temp;
            printf("\n");
        }
    }
}
```

3. Write a program which accept number from user and display below pattern

Input : 9871

Output :

```
1
1 7
1 7 8
1 7 8 9
```

```
#include<stdio.h>
void Pattern(int iNo);
int main()
{
    int no = 0;
    printf("Enter the Number\n");
    scanf("%d", &no);
    Pattern(no);

    return 0;
}
void Pattern(int iNo)
{
    int i = 0, j = 0, idigit = 0, icnt = 0, temp = 0;
    temp = iNo;

    while (iNo != 0)
    {
        icnt++;
        idigit = iNo % 10;
        //rev = rev * 10 + idigit;
        iNo = iNo / 10;
    }
    iNo = temp;
    for (i = 1; i <= icnt; i++)
    {
        for (j = (icnt-i); j < icnt; j++)
        {

            if(iNo != 0)
            {
                idigit = iNo % 10;
                printf("%d\t", idigit);
                iNo = iNo / 10;
            }

        }
        iNo = temp;
        printf("\n");
    }
}
```

4. Write a program which accept number from user and display below pattern

Input : 9871

Output :

1 7 8 9  
1 7 8  
1 7  
1

```
#include<stdio.h>
void Pattern(int iNo);
int main()
{
    int no = 0;
    printf("Enter the Number\n");
    scanf("%d", &no);
    Pattern(no);

    return 0;
}
void Pattern(int iNo)
{
    int i = 0, j = 0, idigit = 0, icnt = 0, temp = 0;
    temp = iNo;

    while (iNo != 0)
    {
        icnt++;
        idigit = iNo % 10;
        //rev = rev * 10 + idigit;
        iNo = iNo / 10;
    }
    iNo = temp;
    for (i = 1; i <= icnt; i++)
    {
        for (j = i-1; j < icnt; j++)
        {
            if (iNo != 0)
            {
                idigit = iNo % 10;
                printf("%d\t", idigit);
                iNo = iNo / 10;
            }

            }
        iNo = temp;
        printf("\n");
    }
}
```

5. Write a program which accept number from user and display below pattern

Input : 9871

Output :

```
1 7 8 9
1 0 0 9
1 0 0 9
1 7 8 9
```

```
#include<stdio.h>
void Pattern(int iNo);
int main()
{
    int no = 0;
    printf("Enter the Number\n");
    scanf("%d", &no);
    Pattern(no);

    return 0;
}
void Pattern(int iNo)
{
    int i = 0, j = 0, idigit = 0, icnt = 0, temp = 0;
    temp = iNo;

    while (iNo != 0)
    {
        icnt++;
        idigit = iNo % 10;
        iNo = iNo / 10;
    }
    iNo = temp;
    for (i = 1; i <= icnt; i++)
    {
        for (j = 1; j <= icnt; j++)
        {
            if (i==1 || j==1 || i==icnt || j==icnt)
            {
                if (iNo != 0)
                {
                    idigit = iNo % 10;
                    printf("%d\t", idigit);
                    iNo = iNo / 10;
                }
            }

            else
            {
                iNo = iNo / 10;
                printf("0\t");
            }
        }

        iNo = temp;
        printf("\n");
    }
}
```