

Assignment - 5 (More on Iterative Control Statements)

1. Write a program to print MySirG N times on the screen

Program -

```
#include<stdio.h>
int main()
{
    int n;
    printf("Enter the value of n: ");
    scanf("%d",&n);
    while(n-->0)
    {
        printf("MySirG\n");
    }
    return 0;
}
```

Output -

```
Enter the value of n: 5
MySirG
MySirG
MySirG
MySirG
MySirG
```

2. Write a program to print the first N natural numbers.

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);
    for(i = 1 ; i <= n ; i++)
        printf("%d ",i);
    return 0;
}
```

Output -

```
Enter the value of n: 8
1 2 3 4 5 6 7 8
```

3. Write a program to print the first N natural numbers in reverse order

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1 ; i <= n ; i++)
        printf("%d ",n + 1 - i);
    return 0;
}
```

Output -

Enter the value of n: 12
12 11 10 9 8 7 6 5 4 3 2 1

4. Write a program to print the first N odd natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1 ; i <= n ; i++)
        printf("%d ",2 * i - 1);
    return 0;
}
```

Output -

Enter the value of n: 5
1 3 5 7 9

5. Write a program to print the first N odd natural numbers in reverse order.

Program -

```
#include<stdio.h>
int main()
{
    int n , i;
```

```

printf("Enter the value of n: ");
scanf("%d",&n);

for(i = n ; i >= 1 ; i--)
    printf("%d ",2 * i - 1);
return 0;
}

```

Output -

Enter the value of n: 10
19 17 15 13 11 9 7 5 3 1

6. Write a program to print the first N even natural numbers

Program -

```

#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1 ; i <= n ; i++)
        printf("%d ",2 * i);
    return 0;
}

```

Output -

Enter the value of n: 8
2 4 6 8 10 12 14 16

7. Write a program to print the first N even natural numbers in reverse order

Program -

```

#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = n ; i >= 1 ; i--)
        printf("%d ",2 * i);
}

```

```
    return 0;
}
```

Output -

Enter the value of n: 8
16 14 12 10 8 6 4 2

8. Write a program to print squares of the first N natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1; i <= n ; i++)
        printf("%d ",i * i);
    return 0;
}
```

Output -

Enter the value of n: 6
1 4 9 16 25 36

9. Write a program to print cubes of the first N natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1; i <= n ; i++)
        printf("%d ",i * i * i);
    return 0;
}
```

Output -

Enter the value of n: 6
1 8 27 64 125 216

10. Write a program to print a table of N.

Program -

```
#include<stdio.h>
int main()
{
    int n , i;

    printf("Enter the value of n: ");
    scanf("%d",&n);

    for(i = 1; i <= 10 ; i++)
        printf("%d * %d = %d\n",n,i,n * i);
    return 0;
}
```

Output -

Enter the value of n: 9

9 * 1 = 9

9 * 2 = 18

9 * 3 = 27

9 * 4 = 36

9 * 5 = 45

9 * 6 = 54

9 * 7 = 63

9 * 8 = 72

9 * 9 = 81

9 * 10 = 90