

Assignment - 4 (Iterative Control Statements)

1. Write a program to print MySirG 5 times on the screen

Program -

```
#include<stdio.h>
int main()
{
    int i = 5;

    while(i-->0)
        printf("MySirG ");

    return 0;
}
```

Output -

MySirG MySirG MySirG MySirG MySirG

2. Write a program to print the first 10 natural numbers.

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("%d ",i);
    return 0;
}
```

Output -

1 2 3 4 5 6 7 8 9 10

3. Write a program to print the first 10 natural numbers in reverse order.

Program -

```
#include<stdio.h>
int main()
{
    int i = 10;
    while(i>0)
        printf("%d ",i--);
    return 0;
}
```

Output - 10 9 8 7 6 5 4 3 2 1

4. Write a program to print the first 10 odd natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("%d ",2 * i - 1);
    return 0;
}
```

Output -

1 3 5 7 9 11 13 15 17 19

5. Write a program to print the first 10 odd natural numbers in reverse order.

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 10 ; i >= 1 ; i--)
        printf("%d ",2 * i - 1);
    return 0;
}
```

Output -

19 17 15 13 11 9 7 5 3 1

6. Write a program to print the first 10 even natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("%d ",2 * i);
    return 0;
}
```

Output -

2 4 6 8 10 12 14 16 18 20

7. Write a program to print the first 10 even natural numbers in reverse order

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 10 ; i >= 1 ; i--)
        printf("%d ",2 * i);
    return 0;
}
```

Output -

20 18 16 14 12 10 8 6 4 2

8. Write a program to print squares of the first 10 natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("%d ",i * i);
    return 0;
}
```

Output -

1 4 9 16 25 36 49 64 81 100

9. Write a program to print cubes of the first 10 natural numbers

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("%d ",i*i*i);
    return 0;
}
```

Output -

1 8 27 64 125 216 343 512 729 1000

10. Write a program to print a table of 5.

Program -

```
#include<stdio.h>
int main()
{
    int i;
    for(i = 1 ; i <= 10 ; i++)
        printf("5 * %d = %d\n", i , 5 * i);
    return 0;
}
```

Output -

```
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50
```