

## Logic Building Assignment : 45

1. Write generic program which accept one value and one number from user. Print that value that number of times on screen.

Input : M 7

Output : M M M M M M M

Input : 11 3

Output : 11 11 11

Input : 3.7 6

Output : 3.7 3.7 3.7 3.7 3.7 3.7

```
template<class T>
```

```
void Display(T value, int iSize)
```

```
{
```

```
    // Logic
```

```
}
```

```
int main()
```

```
{
```

```
    Display('M',7);
```

```
    Display(11,3);
```

```
    Display(3.7,6);
```

```
    return 0;
```

```
}
```

2. Write generic program to accept N values and count frequency of any specific value.

Input : 10 20 30 10 30 40 10 40 10

Value to check frequency : 10

Output : 4

```
template<class T>
```

```
int Frequency(T *arr, int iSize, T iNo)
```

```
{
```

```
    // Logic
```

```

}
int main()
{
    int arr[]={10,20,30,10,30,40,10,40,10};
    int iRet = Frequency(arr,9,10);
    printf("%d",iRet); // 4
    return 0;
}

```

3. Write generic program to accept N values and search first occurrence of any specific value.

Input : 10 20 30 10 30 40 10 40 10

Value to search : 40

Output : 6

```

template<class T>
int SearchFirst(T *arr, int iSize, T iNo)
{
    // Logic
}
int main()
{
    int arr[]={10,20,30,10,30,40,10,40,10};
    int iRet = SearchFirst(arr,9,40);
    printf("%d",iRet); // 6
    return 0;
}

```

4. Write generic program to accept N values and search last occurrence of any specific value.

Input : 10 20 30 10 30 40 10 40 10

Value to search : 40

Output : 8

```
template<class T>
int SearchLast(T *arr, int iSize, T iNo)
{
    // Logic
}

int main()
{
    int arr[]={10,20,30,10,30,40,10,40,10};
    int iRet = SearchLast(arr,9,40);
    printf("%d",iRet); // 8
    return 0;
}
```

5. Write generic program to accept N values and reverse the contents.

Input :            10    20    30    10    30    40    10    40    10

Output :           10    40    10    40    30    10    30    20    10

```
template<class T>
void Reverse(T *arr, int iSize)
{
    // Logic
}

int main()
{
    int arr[]={10,20,30,10,30,40,10,40,10};
    for(int i=0;i<9;i++)
    {
        cout<<arr[i];    // 10 20    30    10    30    40    10    40    10
    }
    Reverse(arr,9);
}
```

---

```
    for(int i=0;i<9;i++)
    {
        cout<<arr[i];    // 10 40    10    40    30    10    30    20    10
    }
    return 0;
}
```