

Array C++ class

```
#include <iostream>
using namespace std;
template<class T>
class Array
{
private:
    T *A;
    int size;
    int length;
public:
    Array()
    {
        size=10;
        A=new T[10];
        length=0;
    }
    Array(int sz)
    {
        size=sz;
        length=0;
        A=new T[size];
    }
    ~Array()
    {
        delete []A;
    }
    void Display();
    void Insert(int index,T x);
    T Delete(int index);
};

template<class T>
void Array<T>::Display()
{
    for(int i=0;i<length;i++)
        cout<<A[i]<<" ";
    cout<<endl;
}

template<class T>
void Array<T>::Insert(int index,T x)
{
    if(index>=0 && index<=length)
    {
        for(int i=length-1;i>=index;i--)
```

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        A[i+1]=A[i];
        A[index]=x;
        length++;
    }
}
template<class T>
T Array<T>::Delete(int index)
{
    T x=0;
    if(index>=0 && index<length)
    {
        x=A[index];
        for(int i=index; i<length-1; i++)
            A[i]=A[i+1];
        length--;
    }
    return x;
}
int main()
{
    Array<char> arr(10);

    arr.Insert(0, 'a');
    arr.Insert(1, 'c');
    arr.Insert(2, 'd');
    arr.Display();
    cout<<arr.Delete(0)<<endl;
    arr.Display();
    return 0;
}

```