

```
// This program demonstrates the use of dynamic arrays
```

```
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```

```
#include <iostream>
```

```
#include <iomanip>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    float *monthSales = nullptr; // a pointer used to point to an array
                                   // holding monthly sales
```

```
    float total = 0; // total of all sales
```

```
    float average;    // average of monthly sales
```

```
    int numOfSales;    // number of sales to be processed
```

```
    int count;         // loop counter
```

```
    cout << fixed << showpoint << setprecision(2);
```

```
    cout << "How many monthly sales will be processed? ";
```

```
    cin >> numOfSales;
```

```
    // Fill in the code to allocate memory for the array pointed to by
    // monthSales.
```

```
    monthSales = new float(numOfSales);
```

```
    if (monthSales == nullptr)
```

```
{
```

```
        cout << "Error allocating memory!\n";
```

```
        return 1;
```

```
}
```

```
    cout << "Enter the sales below\n";
```

```
    for (count = 0; count < numOfSales; count++)
```

```
{
```

```
        cout << "Sales for Month number    "
```

```
            << count + 1 // Fill in code to show the number of the month
```

```
            << ": ";
```

```
        // Fill in code to bring sales into an element of the array
        cin >> monthSales[count];
    }

    for (count = 0; count < numOfSales; count++)
    {
        total = total + monthSales[count];
    }

    average = total/numOfSales;

    cout << "Average Monthly sale is $" << average << endl;

    delete [] monthSales;

    return 0;
}
```