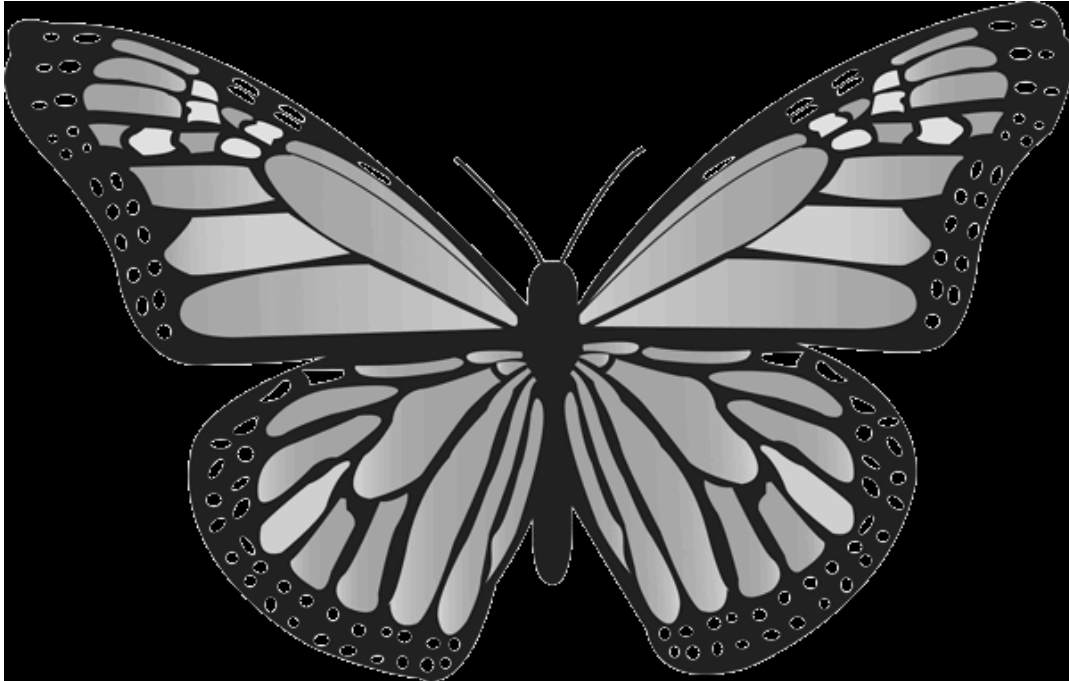


```
In[45]= Image[data = ImageData[
      ColorConvert[Import[FileNameJoin[{NotebookDirectory[], "monarch.gif"}]],
      "Grayscale"]][[All, All, 1]]
```



Out[45]=

```
In[44]= ByteCount[data]
```

Out[44]= 1 828 952

```
In[41]= {u, w, v} = SingularValueDecomposition[data];
```

```
In[42]= ByteCount[{u, w, v}]
```

Out[42]= 5 870 608

```
In[43]= Image[u.w.Conjugate[Transpose[v]]]
```



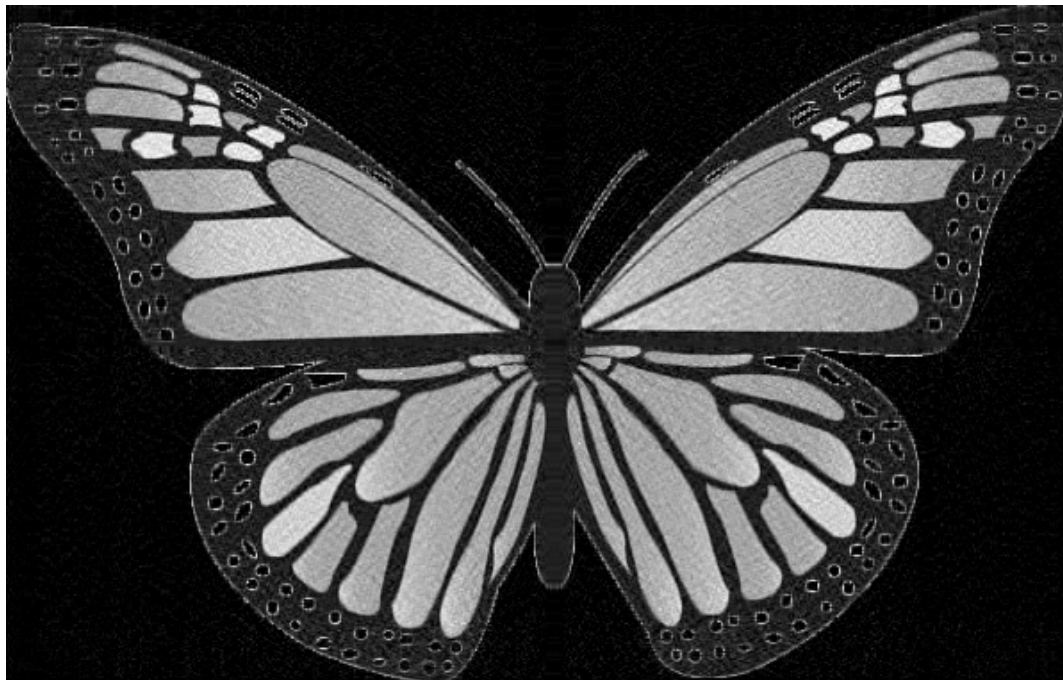
Out[43]=

```
In[39]:= {u, w, v} = SingularValueDecomposition[data, 100];
```

```
In[40]:= ByteCount[{u, w, v}]
```

```
Out[40]:= 865 320
```

```
In[30]:= Image[u.w.Conjugate[Transpose[v]]]
```

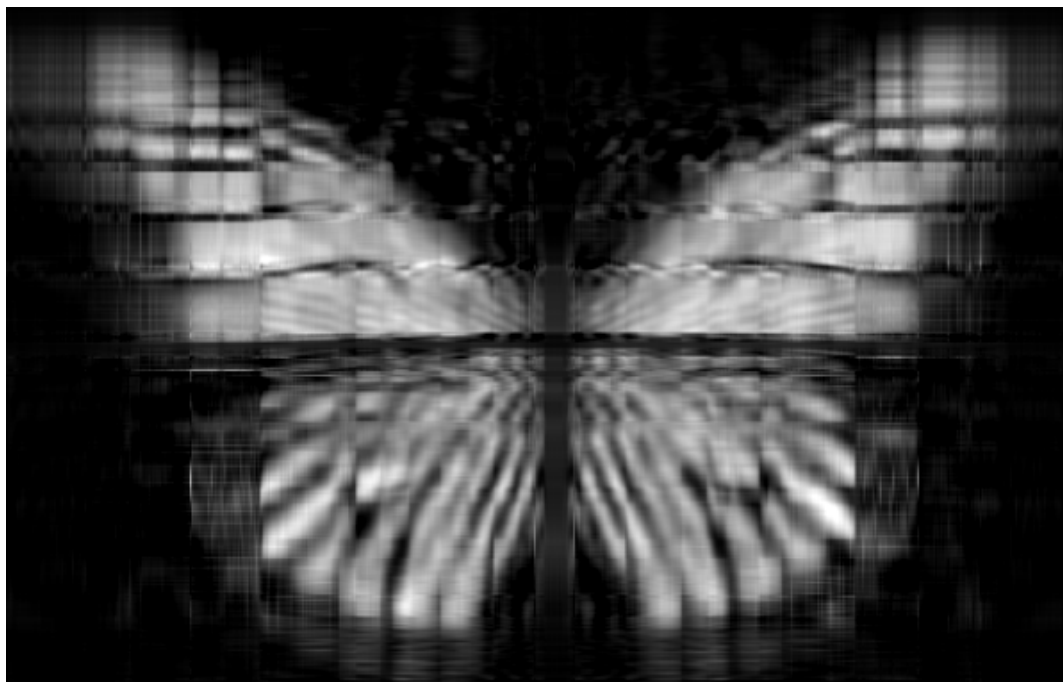


```
In[37]:= {u, w, v} = SingularValueDecomposition[data, 10];
```

```
In[38]:= ByteCount[{u, w, v}]
```

```
Out[38]:= 81 120
```

```
In[32]:= Image[u.w.Conjugate[Transpose[v]]]
```



```
In[33]:= {u, w, v} = SingularValueDecomposition[data, 1];
```

```
In[35]:= ByteCount[{u, w, v}]
```

```
Out[35]= 8616
```

```
In[34]:= Image[u.w.Conjugate[Transpose[v]]]
```

```
Out[34]=
```

