

Question 6

For your chosen λ , which are the most important features of the first 6 faces? Provide the code on how to obtain the most important features.

Marks: 5

```
In [82]: first6 = faces[: 6]
topFeatures = []
for i in range(6):
    topFeatures.append(np.argsort(-H[:,i])[:1])
topFeatures = np.asarray(topFeatures)
first6 = np.append(first6, W.T[topFeatures.T[0]], 0)
for i in range(2):
    if (i == 0):
        plot_gallery('Original', first6[0: (i + 1) * 6], 6, 1)
    else:
        plot_gallery('Top Feature', first6[i * 6: (i + 1) * 6], 6, 1)
```

Original



Top Feature

