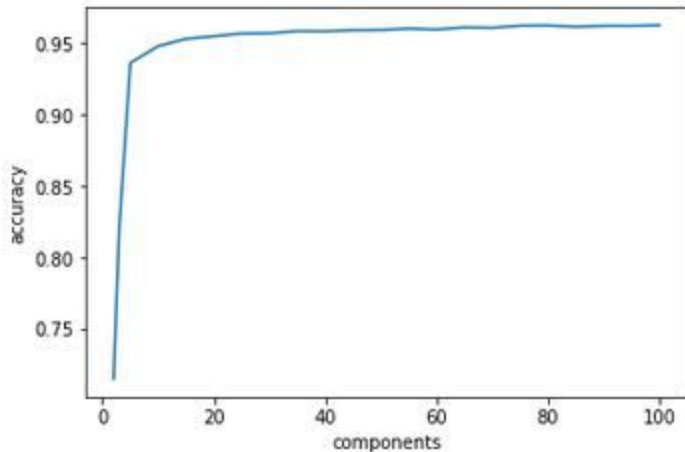


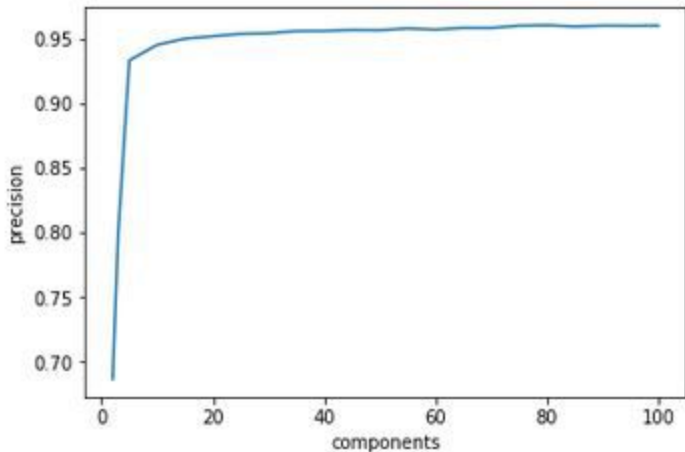
```
In [14]: plt.plot(array,sum_score_acc)
plt.xlabel('components')
plt.ylabel('accuracy')
```

```
Out[14]: Text(0,0.5,u'accuracy')
```



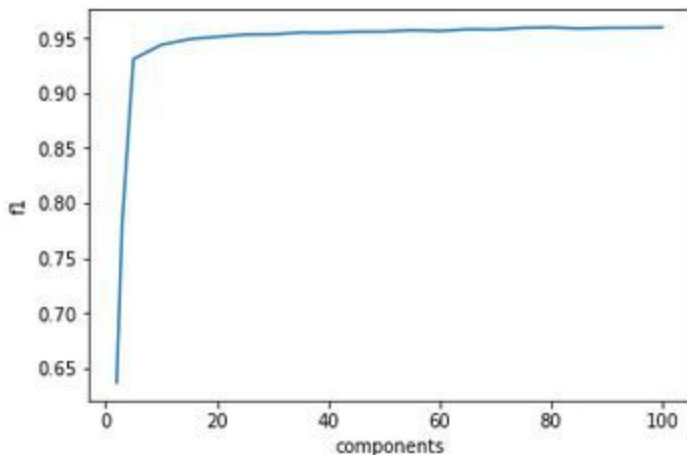
```
In [15]: plt.plot(array,sum_score_pre)
plt.xlabel('components')
plt.ylabel('precision')
```

```
Out[15]: Text(0,0.5,u'precision')
```



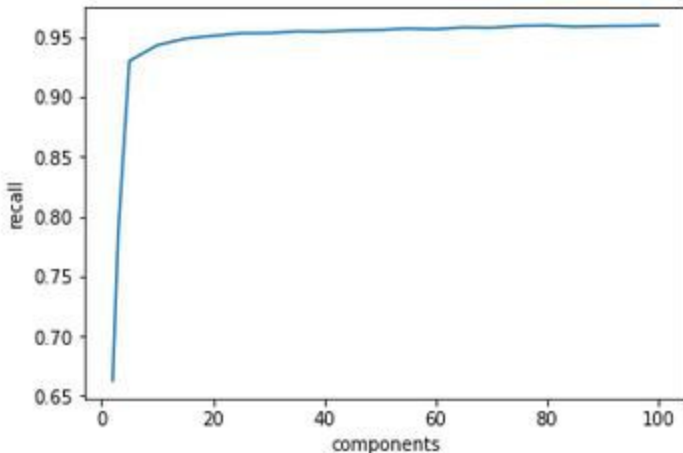
```
In [16]: plt.plot(array,sum_score_f1)
plt.xlabel('components')
plt.ylabel('f1')
```

```
Out[16]: Text(0,0.5,u'f1')
```



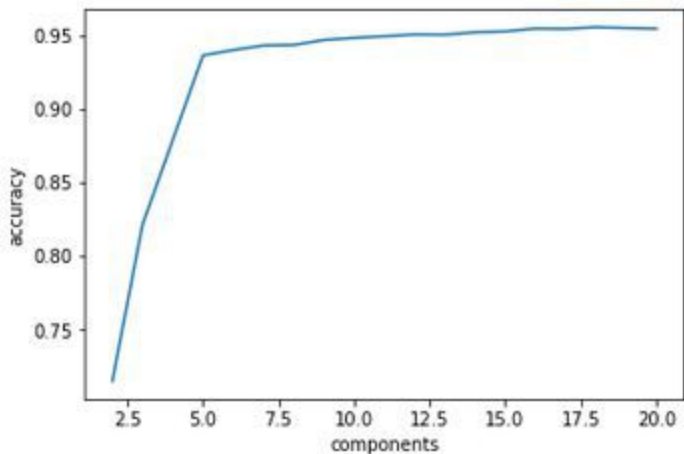
```
In [17]: plt.plot(array,sum_score_rec)
plt.xlabel('components')
plt.ylabel('recall')
```

```
Out[17]: Text(0,0.5,u'recall')
```



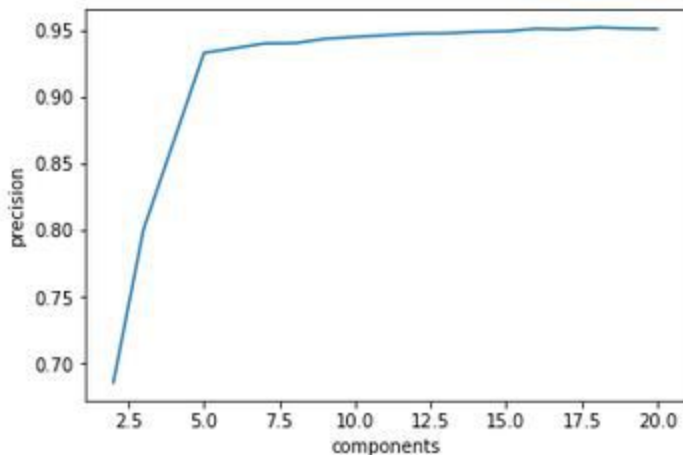
```
In [10]: plt.plot(array2,sum_score_acc)
plt.xlabel('components')
plt.ylabel('accuracy')
```

```
Out[10]: Text(0,0.5,u'accuracy')
```



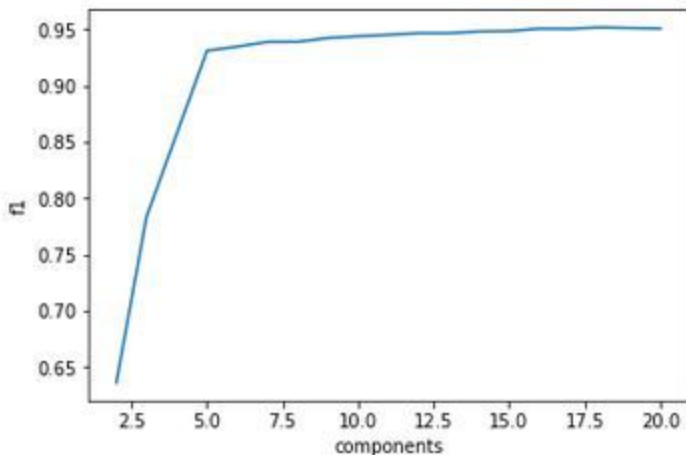
```
In [11]: plt.plot(array2,sum_score_pre)
plt.xlabel('components')
plt.ylabel('precision')
```

```
Out[11]: Text(0,0.5,u'precision')
```



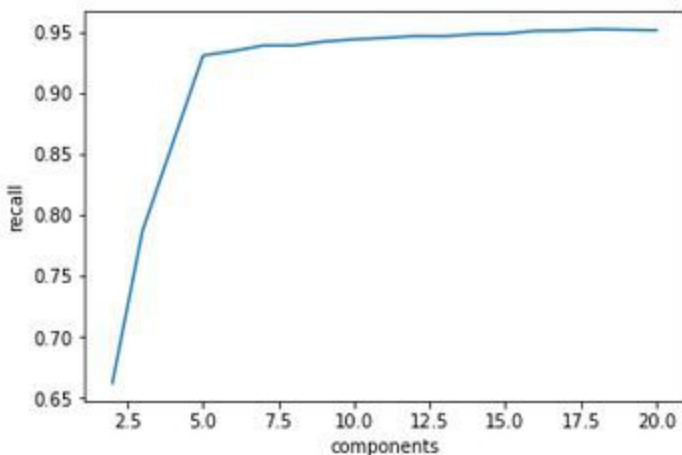
```
In [12]: plt.plot(array2,sum_score_f1)
plt.xlabel('components')
plt.ylabel('f1')
```

```
Out[12]: Text(0,0.5,u'f1')
```



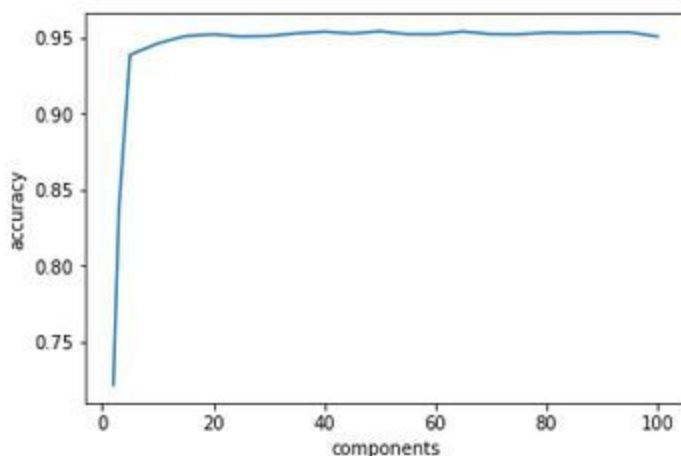
```
In [13]: plt.plot(array2,sum_score_rec)
plt.xlabel('components')
plt.ylabel('recall')
```

```
Out[13]: Text(0,0.5,u'recall')
```



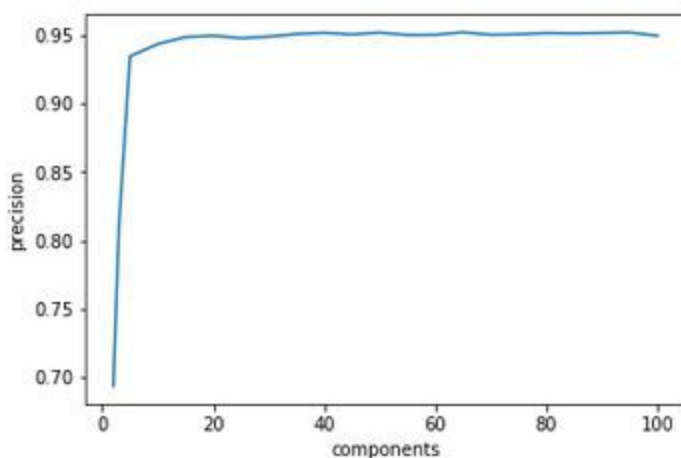
```
In [21]: plt.plot(array, rf_score_acc)
plt.xlabel('components')
plt.ylabel('accuracy')
```

```
Out[21]: Text(0,0.5,u'accuracy')
```



```
In [22]: plt.plot(array, rf_score_pre)
plt.xlabel('components')
plt.ylabel('precision')
```

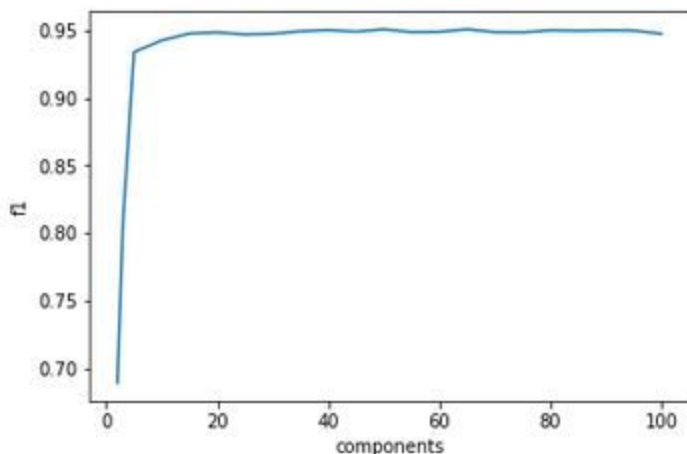
```
Out[22]: Text(0,0.5,u'precision')
```





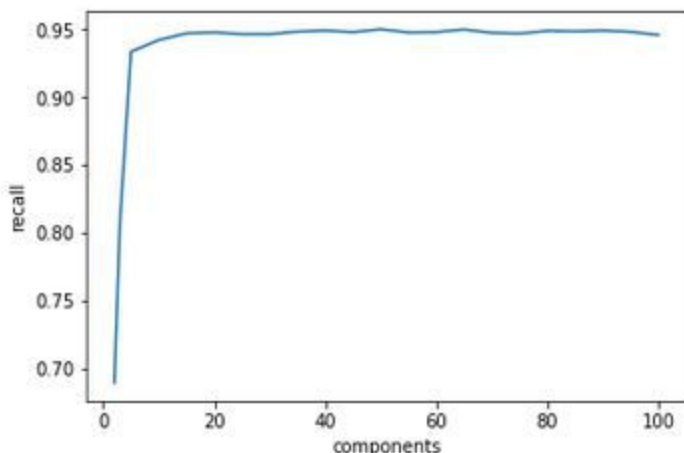
```
In [23]: plt.plot(array,rf_score_f1)
plt.xlabel('components')
plt.ylabel('f1')
```

Out[23]: Text(0,0.5,u'f1')



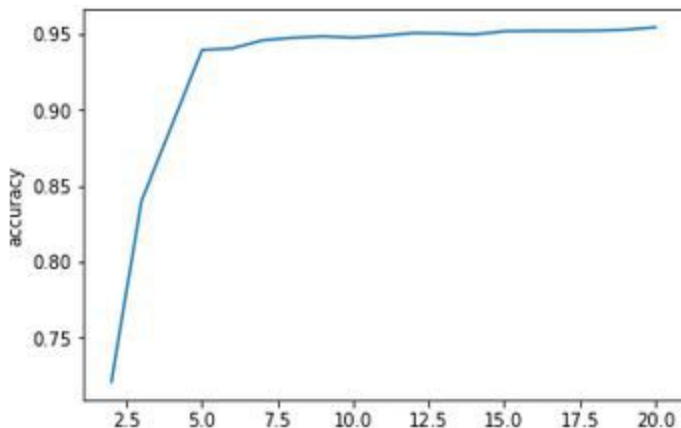
```
In [24]: plt.plot(array,rf_score_rec)
plt.xlabel('components')
plt.ylabel('recall')
```

Out[24]: Text(0,0.5,u'recall')



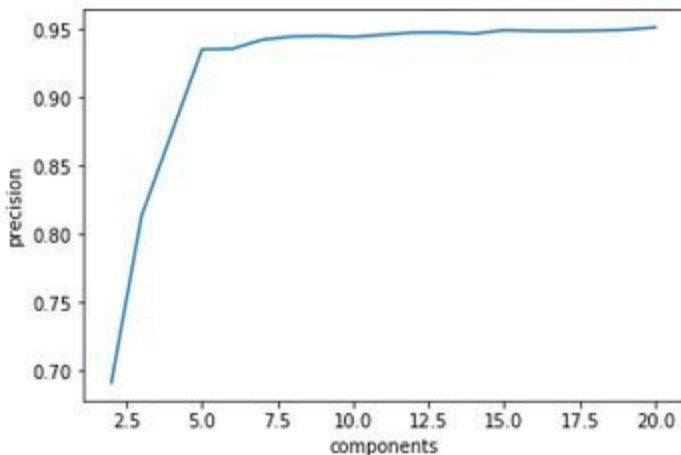
```
In [35]: plt.plot(array2, rf_score_acc)
plt.ylabel('accuracy')
```

```
Out[35]: Text(0,0.5,u'accuracy')
```



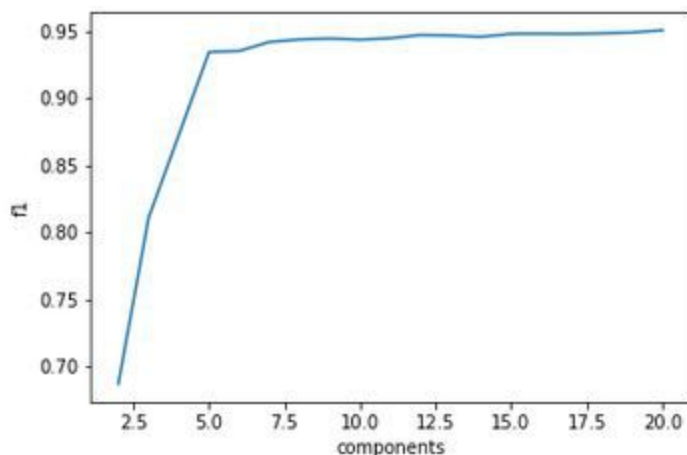
```
In [36]: plt.plot(array2, rf_score_pre)
plt.xlabel('components')
plt.ylabel('precision')
```

```
Out[36]: Text(0,0.5,u'precision')
```



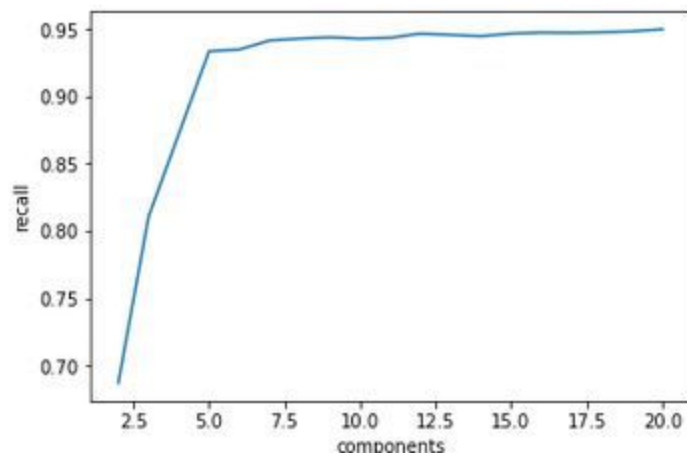
```
In [37]: plt.plot(array2,rf_score_f1)
plt.xlabel('components')
plt.ylabel('f1')
```

Out[37]: Text(0,0.5,u'f1')



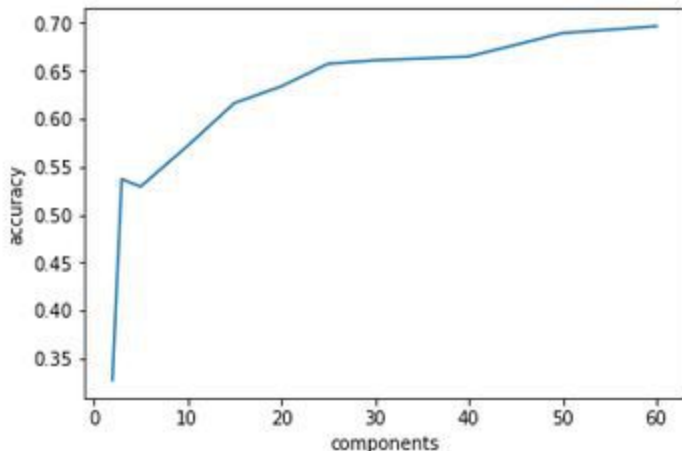
```
In [38]: plt.plot(array2,rf_score_rec)
plt.xlabel('components')
plt.ylabel('recall')
```

Out[38]: Text(0,0.5,u'recall')



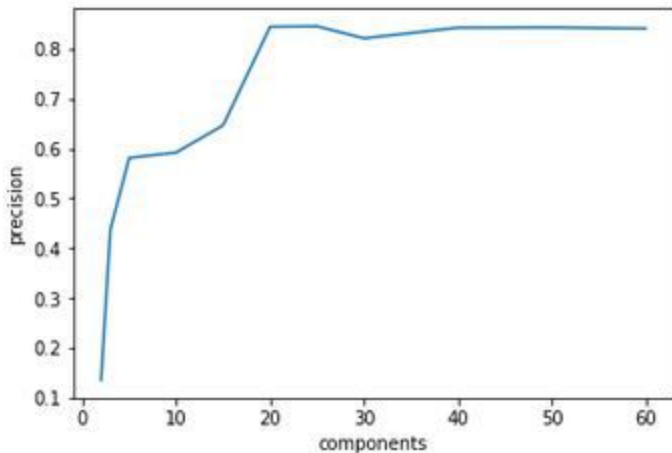
```
In [58]: plt.plot(array,nb_score_acc)
plt.xlabel('components')
plt.ylabel('accuracy')
```

```
Out[58]: Text(0,0.5,u'accuracy')
```



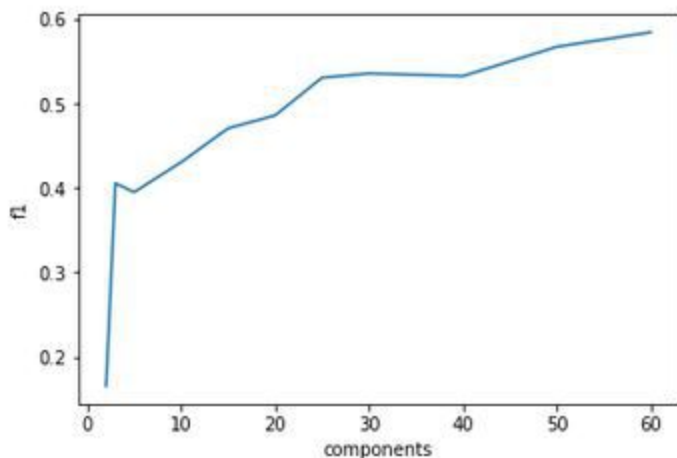
```
In [59]: plt.plot(array,nb_score_pre)
plt.xlabel('components')
plt.ylabel('precision')
```

```
Out[59]: Text(0,0.5,u'precision')
```



```
In [60]: plt.plot(array,nb_score_f1)
plt.xlabel('components')
plt.ylabel('f1')
```

Out[60]: Text(0,0.5,u'f1')



```
In [61]: plt.plot(array,nb_score_rec)
plt.xlabel('components')
plt.ylabel('recall')
```

Out[61]: Text(0,0.5,u'recall')

