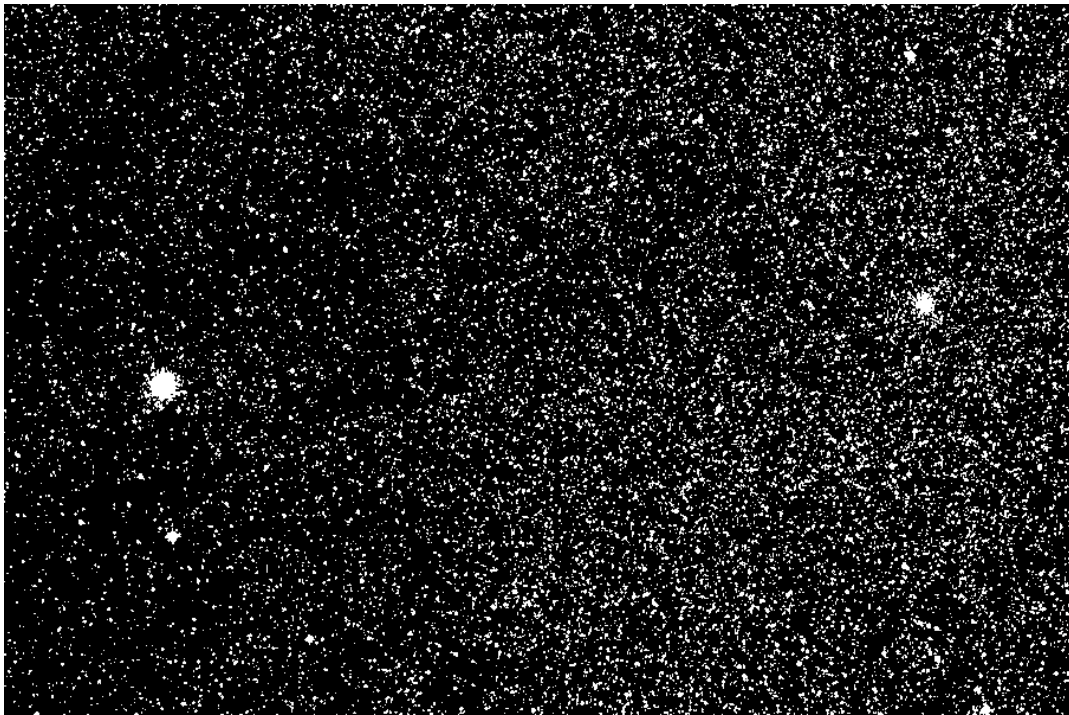


grainyImg =



```
(*  
1. Convert the image to grayscale;  
2. Create a binary image with ones and zeros  
*)
```

```
binImg = Binarize[ColorConvert[grainyImg, "Grayscale"]]
```



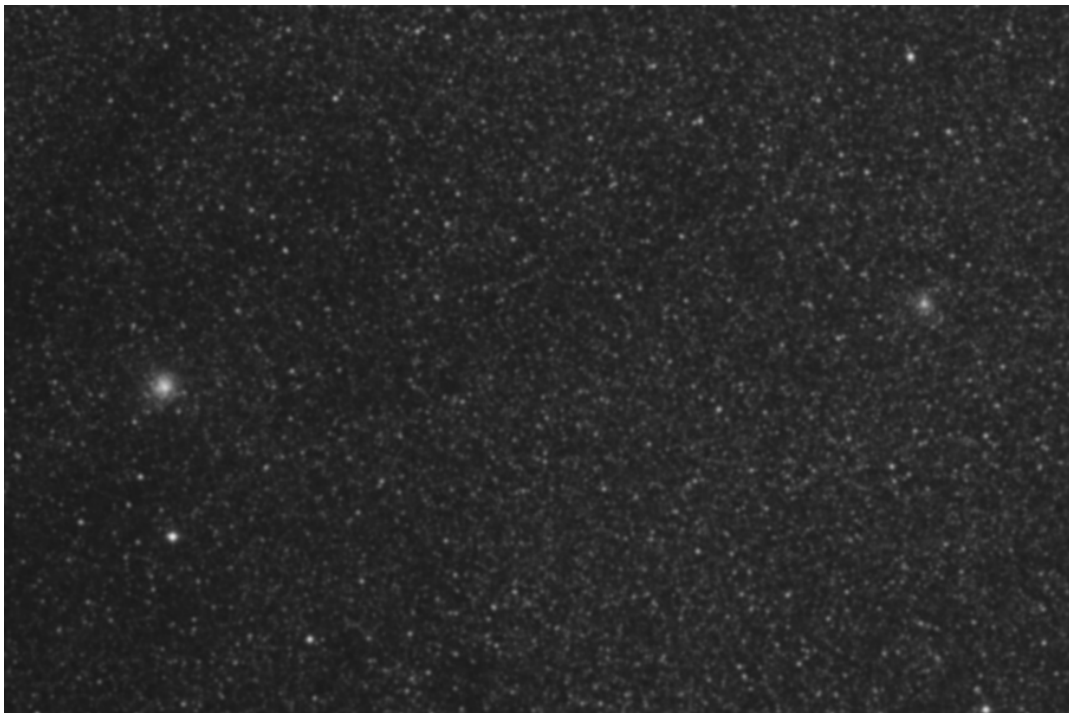
```
(* ho many pixels are black? *)
```

```
Count[Flatten[ImageData[binImg]], 1]
```

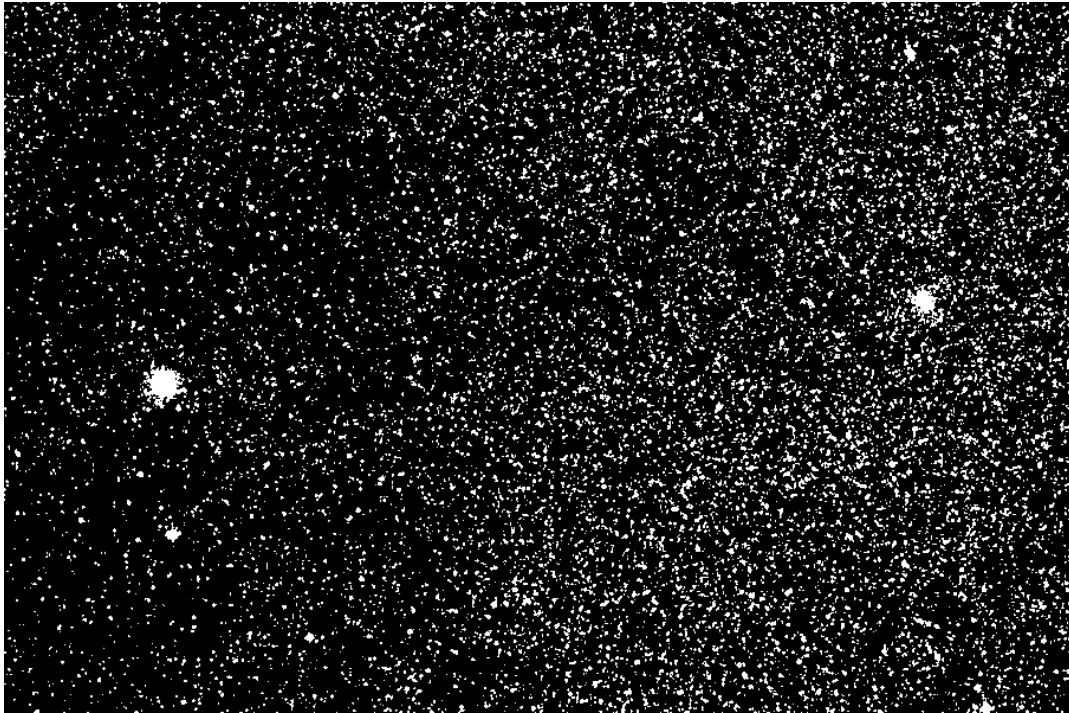
```
59138
```

```
(* Repeat the procedure by blurring the image *)
```

```
blurredImg = ColorConvert[Blur[grainyImg, 3], "Grayscale"]
```



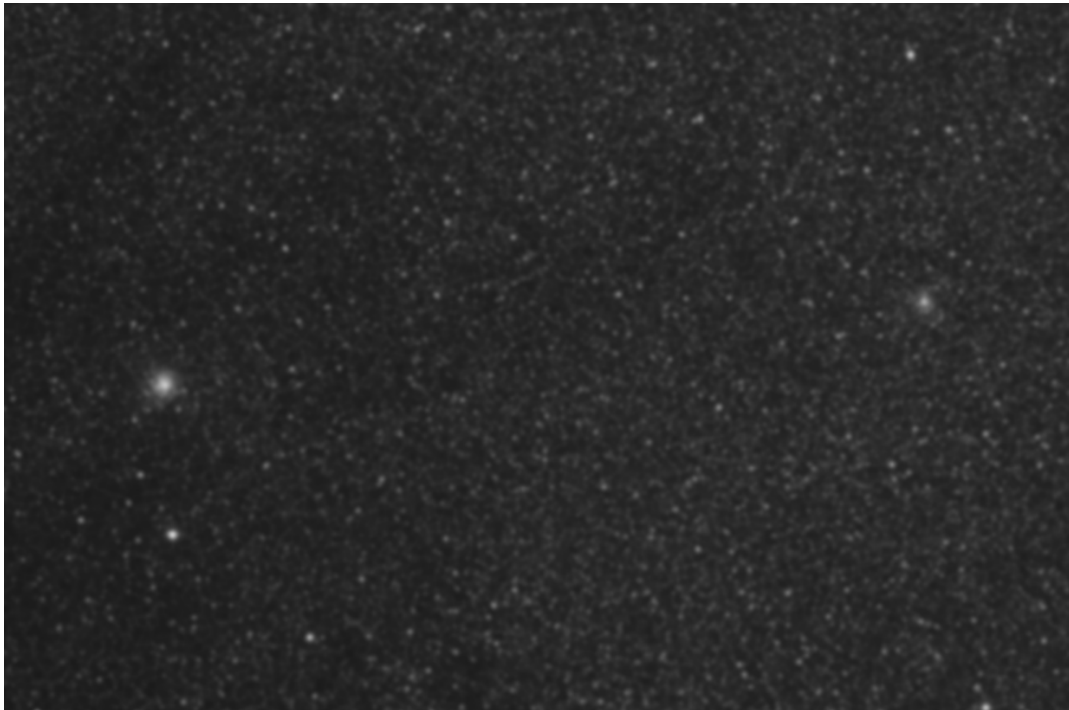
```
Binarize[blurredImg]
```



```
Count[Flatten[ImageData[Binarize[blurredImg]]], 1]
```

```
112342
```

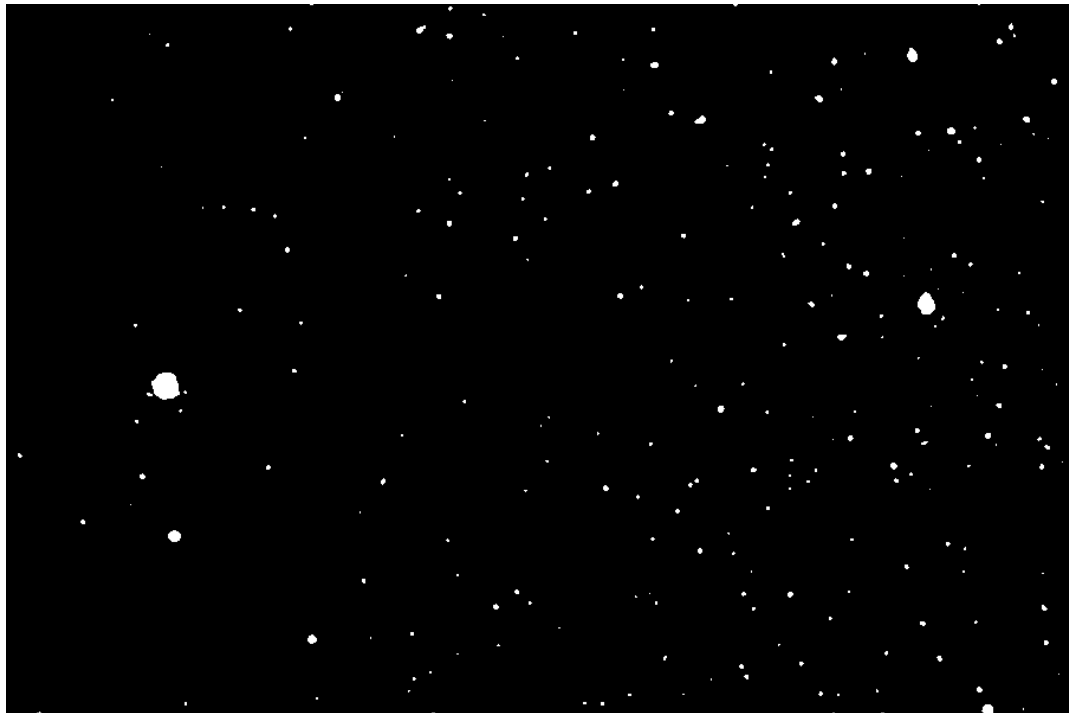
```
Blur[grainyImg, 4]
```



```

Binarize[
  ColorConvert[Blur[grainyImg, 4], "Grayscale"], 0.3
]

```

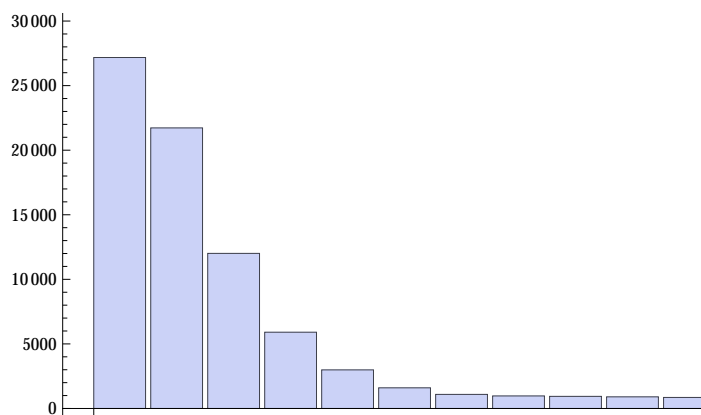


```

lst = Table[
  Count[
    Flatten[
      ImageData[
        Binarize[
          ColorConvert[Blur[grainyImg, n], "Grayscale"], 0.3
        ]
      ], 1], {n, 0, 10, 1}
]
{27177, 21725, 12009, 5905, 2988, 1599, 1090, 971, 937, 901, 854}

```

```
BarChart[lst, PlotRange -> {{0, 11}, {0, 30000}}]
```



```
ListLinePlot[lst, PlotRange → Automatic]
```

