

If we upload the image on **Cyberchef**, we can see that **0xffd9** appears 2 times. More specifically, at the bottom of the file : **ff d9 88 9f 8d a7 ae aa b9 a5 b0 9e a9 be a5 bf be 94 b9 fb a8 a0 fe b6 ff d9**. For the previous hex code, I used this recipe on Cyberchef :

The screenshot shows the CyberChef interface with the following configuration:

- From Hex**: Delimiter set to "Auto".
- XOR Brute Force**: Key length set to 2, Sample length set to 100, Sample offset set to 0. Scheme is set to "Standard". The "Print key" checkbox is checked, while "Null preserving" and "Output as hex" are unchecked.
- Output**: A list of generated keys. One key, "CTFlearn{Ubuntu_r0ck5}4", is highlighted in yellow.

```

88 9f 8d a7 ae aa b9 a5 b0 9e a9 be a5 bf be 94 b9 fb a8 a0 fe b6 ff
88 9f 8d a7 ae aa b9 a5 b0 9e a9 be a5 bf be 94 b9 fb a8 a0 fe b6 ff

Key = cbc4: CTFlearn{Ubuntu_r0ck5}4
Key = cbc5: CZFbeor`{[b{nuQr}ce5s4
Key = cbc6: CYFaelrc{XbxnyuRrcf5p4
Key = cbc7: CXF`emrb{YbynxuSr<cg5q4
Key = cbc8: CWFoebrm{Vbvnwu\r3ch5~4
Key = cbc9: CVFnecl{Wbwnvu]r2c15•4
Key = cbca: CUFme`ro{Tbtuu^ricj5|4
Key = ccbc: CTFlearn{Ubuntu_r0ck5}4
Key = cbcc: CSFkefri{RbrnsuXr7c15z4
Key = cbcd: CRFjegrh{SbsnruYr6cm5{4
Key = cbce: CQFiedrk{PbpnquZr5cn5x4

```

THE FLAG : CTFlearn{Ubuntu_r0ck5}
~Z4que