**Description**

Qn. A mysterious hooded figure handed you a tape [<http://tiny.cc/ped5vz>] and an image [<http://tiny.cc/qed5vz>], saying they contained something which will lead your path to success. However, both the audio and image seem to reveal nothing. Perhaps there is more to it than meets the eye and ear.

**Ideas And Observations**

1. We are being given an audio file and an image and asked to find the flag. So we proceeded with the image .We saw that there are colours and in blocks of six which were 16 in total and looked for such type of cipher.
2. We found [hexahue cipher](https://www.dcode.fr/hexahue-cipher#:~:text=Hexahue%20has%2040%20characters%3A%20the,black%20and%20one%20all%20white).) in which these colours coded for respective alphabets

And found after decoding it decode to “KSHATRIYATAKNEEK”.

1. For the audio we used a number of sound steganography softwares like audacity, sonic visualiser but we didn’t find anything useful. At last, we stumbled upon A github repo named HiddenWave using that we tried to find if any secret message was hidden in the audio. Yes, indeed we found one “7ECDB1519CC075C6631CAE5DAD922C5C”.
2. Looking at the code it appeared to be a hex code. We tried to convert directly to text but gibberish appeared which gave us the idea that infact this hex code was encrypted. So, we tried to decrypt using a lot of old algorithms like XOR, Brute force Hash ,MD5 , SHA1 etc. but we didn’t find anything meaningful.
3. So, we turned towards Modern Cryptography algorithms like DES, RES . In fact AES was used for the Encryption using the Key “KSHATRIYATAKNEEK” (which we found in the image). On decrypting we found the flag –“BAKAIT“. Hence the Flag Was “BAKAIT“

**Conclusion**

**The Flag is -- “BAKAIT”.**

**We used** [**AES decryption**](https://www.devglan.com/online-tools/aes-encryption-decryption) **tool we found online.**