

## BRIEF

### CHALLENGE:

There are five files that have issues when trying to open them. Your help is needed to fix these files. To do this you will need to determine the issue with the files and how to fix them using a Hex Editor.

### STEP 1 - DISCOVER

Review the interactive **Online Discovery Brief** to learn:

- Different types of file issues: **corrupted file, file with wrong file extension, file embedded in another file**
- How to identify **File Type** by its Hex signature and ASCII identifier
- How to use a **Decision Flow Chart** to identify the file issue
- How to use an online **Hex Editor** to fix the file

Once you have completed the Online Discovery Brief, continue on to Step 2: Investigate Folder to fix the issues with the 5 Challenge Files.

### STEP 2 – INVESTIGATE FOLDER

There are 5 Challenge Files. Each file has an issue.

- Use the **Decision Flow Charts** on the last page to determine the issue with file.
- Use the **File Signature Key** to determine a file type by its Hex signature and ASCII identifier.
- Use the online **Hex Editor** to fix the files. To do this follow what you learned in the **Online Discovery Brief**. There is also a **Hex Editor Tips & Reference Guide** in the Investigate Folder
- Here is the link to the **online Hex Editor**: <https://hexed.it>

When you fix the 5 files and open them you will find a **code word**. Keep track of the answers in **the Scorecard** on the next page.

### STEP 3 - REPORT

- After you have fixed as many files as you have time for enter the **code words** in the **Online Mastery Scorecard** to collect flags for this SideQuest.
- Take a snapshot of the flags you have collected and turn it in.

## SCORECARD

CHALLENGE	FILE ISSUE	CODE WORD
Challenge 1 File 1_Passwords		
Challenge 2 File 2_Forest		
Challenge 3 File 3_Prague		
Challenge 4 File 4_Aurora		
Challenge 5 File 5_Beach		

## FILE SIGNATURE KEY

File Extension	Hex Signature	ASCII Identifier	Offset
PDF	25 50 44 46	PDF	No
ZIP	50 4B 03 04	PK	No
JPEG, JPG	FF D8 FF E0	JFIF	No
PNG	89 50 4E 47 0D 0A 1A 0A	PNG	No
XLS	45 78 63 65 6C	Excel	Yes

Offset means the hex signature/ASCII identifier doesn't start at the beginning of the file.

Source: [https://www.garykessler.net/library/file\\_sigs.html](https://www.garykessler.net/library/file_sigs.html)

# SIDEQUEST 1

## DECISION FLOWCHART

