Title: Use USB drive as data source and Belkasoft X to demonstrate data / file carving

Objective:
The objective of this experiment is to utilize Belkasoft X, a digital forensics tool, to demonstrate data/file carving from a USB drive.

Requirements:
   Belkasoft installer

Procedure/Experiment Steps:
1. Prepare the Environment: Ensure that the computer meets the system requirements for running Belkasoft X. Install Belkasoft X on the computer.
2. Connect USB Drive: Connect the USB drive containing the data for carving to the computer.
3. Launch Belkasoft X: Start Belkasoft X from the installed location or desktop shortcut.
4. Add USB Drive as Evidence Source: Within Belkasoft X, add the connected USB drive as an evidence source. Follow the provided instructions in the software to add and mount the USB drive.
5. Start Carving Process: Initiate the carving process within Belkasoft X to search for and recover deleted or hidden files from the USB drive. Configure the carving settings according to your requirements.
6. Monitor Carving Progress: Let Belkasoft X perform the carving process on the USB drive. Monitor the progress of the carving operation within the software.
7. Examine Carved Files: Once the carving process is complete, explore the carved files within Belkasoft X. Review the recovered files and metadata, such as file types, timestamps, and file paths.
8. Recover Selected Files: Select the desired carved files within Belkasoft X and recover them to a designated location on the computer's storage.
9. Document Findings: Record the details of the carving process, including notable findings, recovered files, timestamps, or any other relevant observations.

Result:
By using Belkasoft X, we successfully demonstrated data/file carving from a USB drive. The USB drive containing the data was added as an evidence source within Belkasoft X. The carving process was initiated, and deleted or hidden files were recovered from the USB drive. The carved files were examined within Belkasoft X, and selected files were successfully recovered to a designated location for further analysis.

Conclusion:
Belkasoft X proved to be an effective digital forensic tool for data/file carving from a USB drive. Through its intuitive interface and carving capabilities, we were able to search for and extract recoverable files from the USB drive. Carving can be a valuable technique in forensic investigations, data recovery processes, and extracting valuable artifacts from various data sources.

Future Scope:

1. Advanced carving techniques: Explore Belkasoft X's advanced carving features, such as custom file signatures, data pattern analysis, or deep carving for fragmented files.
2. File system-specific carving: Investigate Belkasoft X's support for specific file systems (e.g., FAT, NTFS, HFS+) and perform carving based on file system-specific structures.
3. Carving from other data sources: Extend carving capabilities to other data sources, such as disk images, memory dumps, or network captures, using Belkasoft X.
4. Integration with other forensic tools: Explore the integration of Belkasoft X with other digital forensic tools to enhance analysis and cross-validation of carved files.
5. Stay updated with Belkasoft X: Regularly update Belkasoft X to benefit from the latest features, improvements, and support for new file formats or carving techniques, ensuring efficient and accurate file carving.