|  |  |  |  |
| --- | --- | --- | --- |
| File Type | Extension | Signature | Signature Offset |
| Executable file | Executable and linkable format has no extension (as seen with the executables in the project folder. Normal executable such as mystring.exe has the .exe extension) Note- the executable tested is in linkable format. | ELF | Offset is equal to 1 - .ELF............ |
| WAV file | .wav | RIFF (RIFF????WAVE) | Offset is equal to 0 -RIFFtu..WAVEfmt |
| JPEG | .jpg or .jpeg | JFIF (In vim – ÿØÿà^@^PJFIF) | Offset is equal to 6 (seen when printing in terminal) - ......JFIF.....` |
| GIF | .gif | GIF89a | Offset is equal to 0 - GIF89a.......E.. |
| TAR | .tar | ustar | Offset is equal to 257 |
| ZIP | .zip | PK | Offset is equal to 0 - PK.........e.Tb\* |

Note – The files were moved from a windows system using scp.

**Executable file memdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump endian 100

0x0000000000000000: 7F 45 4C 46 02 01 01 00 00 00 00 00 00 00 00 00 .ELF............

0x0000000000000010: 03 00 3E 00 01 00 00 00 80 10 00 00 00 00 00 00 ..>.............

0x0000000000000020: 40 00 00 00 00 00 00 00 F0 36 00 00 00 00 00 00 @........6......

0x0000000000000030: 00 00 00 00 40 00 38 00 0D 00 40 00 1F 00 1E 00 ....@.8...@.....

0x0000000000000040: 06 00 00 00 04 00 00 00 40 00 00 00 00 00 00 00 ........@.......

0x0000000000000050: 40 00 00 00 00 00 00 00 40 00 00 00 00 00 00 00 @.......@.......

0x0000000000000060: D8 02 00 00 ....

**WAV file mempdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump sample.wav 100

0x0000000000000000: 52 49 46 46 74 75 0D 00 57 41 56 45 66 6D 74 20 RIFFtu..WAVEfmt

0x0000000000000010: 10 00 00 00 01 00 01 00 44 AC 00 00 88 58 01 00 ........D....X..

0x0000000000000020: 02 00 10 00 64 61 74 61 50 75 0D 00 00 00 1C 09 ....dataPu......

0x0000000000000030: 2C 12 25 1B FA 23 A1 2C 0E 35 36 3D 0E 45 8D 4C ,.%..#.,.56=.E.L

0x0000000000000040: A9 53 57 5A 91 60 4D 66 84 6B 30 70 4A 74 CC 77 .SWZ.`Mf.k0pJt.w

0x0000000000000050: B4 7A FC 7C A2 7E A3 7F FE 7F B4 7F C3 7E 2E 7D .z.|.~.......~.}

0x0000000000000060: F6 7A 1F 78 .z.x

**JPEG file memdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump imagination.jpg 100

0x0000000000000000: FF D8 FF E0 00 10 4A 46 49 46 00 01 01 01 00 60 ......JFIF.....`

0x0000000000000010: 00 60 00 00 FF DB 00 43 00 03 02 02 03 02 02 03 .`.....C........

0x0000000000000020: 03 03 03 04 03 03 04 05 08 05 05 04 04 05 0A 07 ................

0x0000000000000030: 07 06 08 0C 0A 0C 0C 0B 0A 0B 0B 0D 0E 12 10 0D ................

0x0000000000000040: 0E 11 0E 0B 0B 10 16 10 11 13 14 15 15 15 0C 0F ................

0x0000000000000050: 17 18 16 14 18 12 14 15 14 FF DB 00 43 01 03 04 ............C...

0x0000000000000060: 04 05 04 05 ....

**GIF file memdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump 4JU.gif 100

0x0000000000000000: 47 49 46 38 39 61 F0 00 98 00 F7 FF 00 45 FE 07 GIF89a.......E..

0x0000000000000010: 38 FF 08 10 42 73 F4 FE FE 75 42 FF F9 A8 AD F3 8...Bs...uB.....

0x0000000000000020: 68 D4 A0 8C 75 8D 8D 8C FF BB D7 75 75 75 67 8F h...u......uuug.

0x0000000000000030: AB B7 FF 07 21 4C 71 10 AD FF 2F 46 A4 AA CF E0 ....!Lq.../F....

0x0000000000000040: FD D9 B7 03 03 0B 48 71 95 92 B7 D1 0C 2D 4E 2A ......Hq.....-N\*

0x0000000000000050: E5 63 FF A6 13 F1 4A B9 FF E7 B5 2D 2D 2E FF 9C .c....J....--...

0x0000000000000060: FF F9 FC 4B ...K

**TAR file memdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump archive.tar 300

0x0000000000000000: 32 30 32 32 2D 32 33 20 41 63 61 64 65 6D 69 63 2022-23 Academic

0x0000000000000010: 20 43 61 6C 65 6E 64 65 72 2E 70 64 66 00 00 00 Calender.pdf...

0x0000000000000020: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000030: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000040: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000050: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000060: 00 00 00 00 30 30 30 30 37 37 37 00 30 30 30 30 ....0000777.0000

0x0000000000000070: 30 30 30 00 30 30 30 30 30 30 30 00 30 30 30 30 000.0000000.0000

0x0000000000000080: 31 35 34 32 35 32 33 00 31 34 32 35 30 31 35 31 1542523.14250151

0x0000000000000090: 32 34 35 00 30 31 32 34 33 35 00 20 30 00 00 00 245.012435. 0...

0x00000000000000A0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x00000000000000B0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x00000000000000C0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x00000000000000D0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x00000000000000E0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x00000000000000F0: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000100: 00 75 73 74 61 72 20 20 00 00 00 00 00 00 00 00 .ustar ........

0x0000000000000110: 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 ................

0x0000000000000120: 00 00 00 00 00 00 00 00 00 00 00 00 ............

**ZIP file memdump:**

snadgaun@data:~/cs250/project2-src$ myfiledump all.zip 100

0x0000000000000000: 50 4B 03 04 14 00 00 00 08 00 F1 65 C8 54 62 2A PK.........e.Tb\*

0x0000000000000010: 18 9E 60 BF 06 00 53 C5 06 00 1D 00 00 00 32 30 ..`...S.......20

0x0000000000000020: 32 32 2D 32 33 20 41 63 61 64 65 6D 69 63 20 43 22-23 Academic C

0x0000000000000030: 61 6C 65 6E 64 65 72 2E 70 64 66 00 43 40 BC BF alender.pdf.C@..

0x0000000000000040: 25 50 44 46 2D 31 2E 37 0A 0A 34 20 30 20 6F 62 %PDF-1.7..4 0 ob

0x0000000000000050: 6A 0A 3C 3C 0A 2F 46 69 6C 74 65 72 20 2F 46 6C j.<<./Filter /Fl

0x0000000000000060: 61 74 65 44 ateD