FILE COMPRESSION
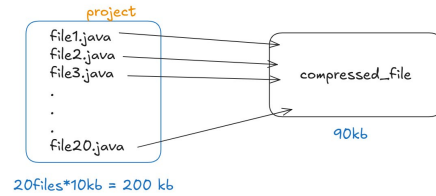
>> Compression: reducing the amount of space a data consumes.

| Torrent 4gb | → Network → | 1 gb |
| Laptop 4 gb | | |

↓ Download

project

file1.java
file2.java
file3.java
.
.
.
file20.java

→ compressed_file

90kb

20files*10kb = 200 kb

1. One-by-one files will get compressed first.
2. Then, added to the compressed file.

project

file1.java
file2.java
file3.java
.
.
.
file20.java

200kb

→ combining → archieved_file → compressed_file

200 + kb
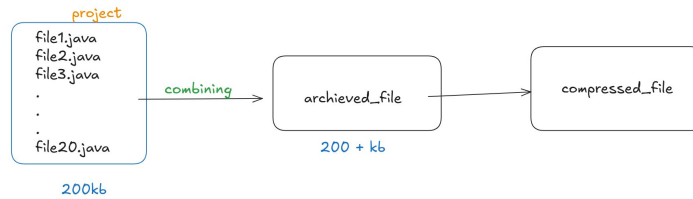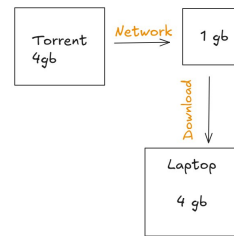
1. Create a bundle by combining multiple files.
2. Then we compress the archived file.

Archieveing: combining multiple files into a single gile.

↓

'tar' ⟶ Tape Archieve
⟶ used to create a bundle of file.
⟶ Extension is ',tar'
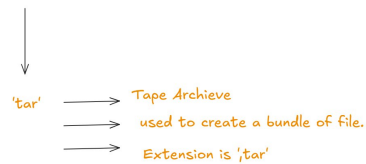
>> To creata a tar file : tar cvf archieve.tar file1.java file2.java ... file20.java

tar cvf archieve.tar *.java   tar cvf archieve.tar *.txt

tar cvf archieve.tar *

c -> create am archieved fie
v -> verbose (shows on what files work is done)
f -> file_name

>> To extract files from a .tar file: tar xvf archieve.tar *

tar xvf archieve.tar file1.java

x -> extract

WAYS OF COMPRESSION:

1. zip

>> Compress all the files into a single compressed files, one - by -one.
>> Extension is '.zip'.

-- To create a zip file : zip file_name.zip *   zip demo.zip *.txt   zip arch.zip arc.tar

-- To extract/unzip the file: unzip file_name.zip   unzip demo.zip

2. gzip

>> greater compression.
>> compressing the already compressed file.
>> compresses the archieved file.
>> Extension is '.gz.

-- To create a gzip file : gzip zip_filename   gzip demo.zip

gzip archived_filename   gzip arc.tar

-- To extract the gzip file: gunzip filename   gunzip demo.zip.gz