```python
1  import numpy as np
2  import matplotlib.pyplot as plt
3  import cv2 as cv
4  filePath = '/content/drive/MyDrive/glen-carrie-XfA12IEoUkc-unsplash.jpg'
5  image = cv.imread(filePath, cv.IMREAD_GRAYSCALE)
6  f_transform = np.fft.fft2(image)
7  f_transform_shifted = np.fft.fftshift(f_transform)
8
9  # Compute the magnitude spectrum
10 magnitude_spectrum = 20 * np.log(np.abs(f_transform_shifted))
11
12 # Plot the original image and its magnitude spectrum
13 plt.figure(figsize=(12, 6))
14
15 plt.subplot(1, 2, 1)
16 plt.title('Original Image')
17 plt.imshow(image, cmap='gray')
18
19 plt.subplot(1, 2, 2)
20 plt.title('Magnitude Spectrum')
21 plt.imshow(magnitude_spectrum, cmap='gray')
22
23 plt.show()
24 print(image)
```
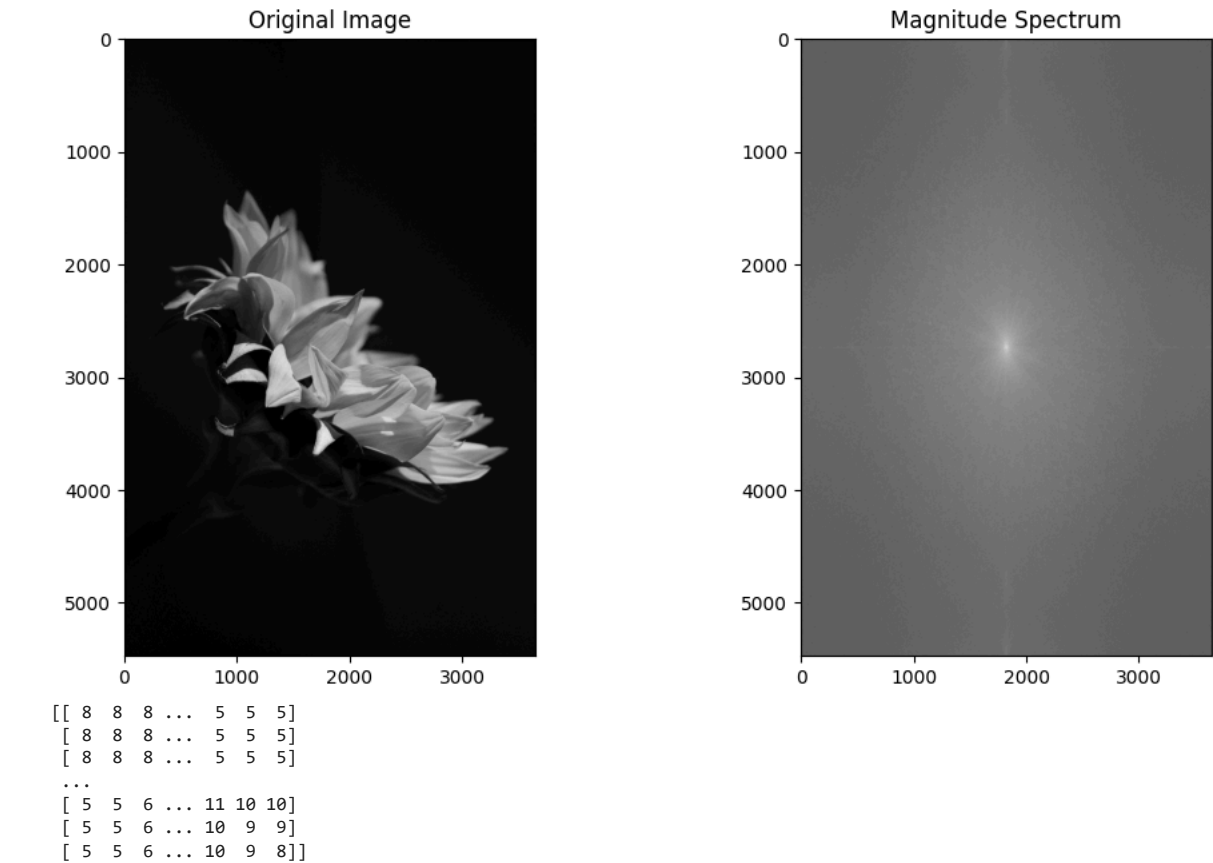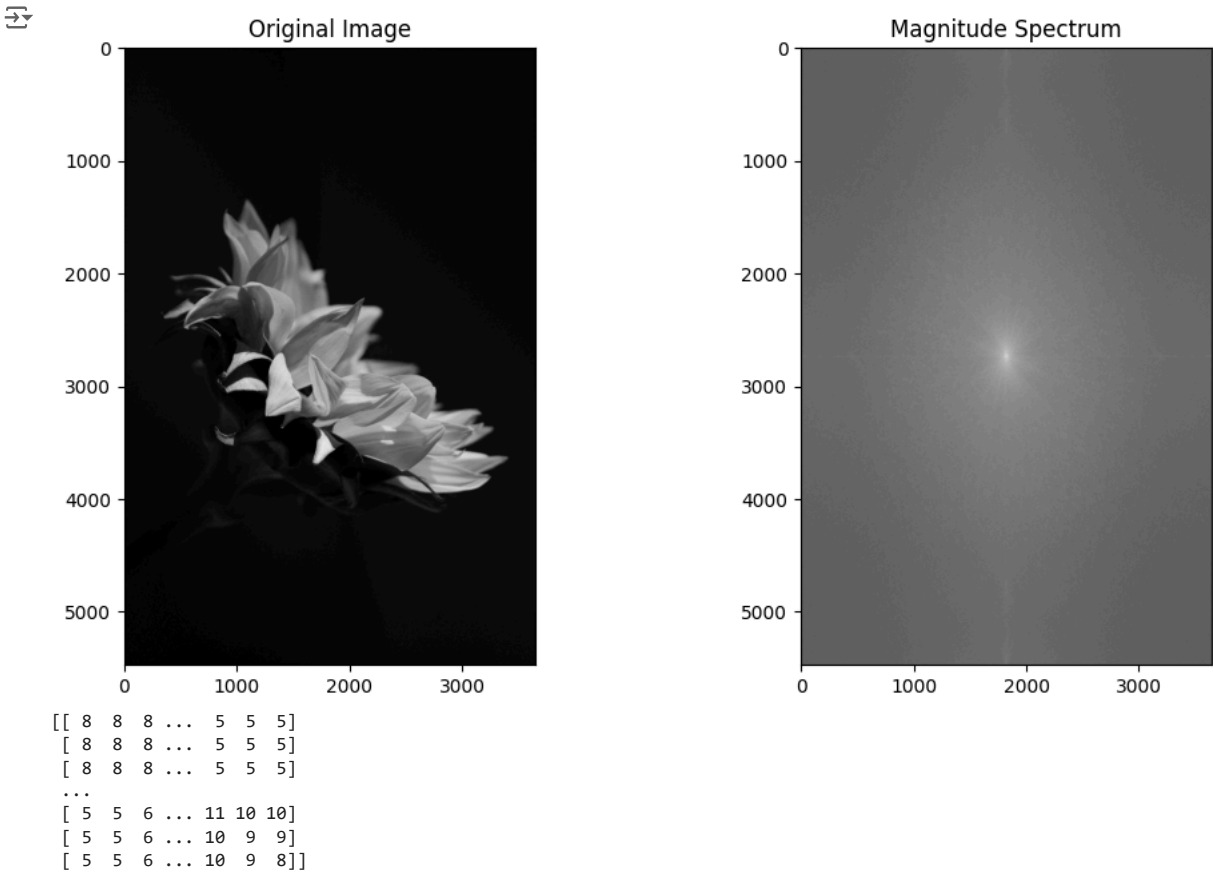
Original Image

Magnitude Spectrum


```
[[ 8  8  8 ...  5  5  5]
 [ 8  8  8 ...  5  5  5]
 [ 8  8  8 ...  5  5  5]
 ...
 [ 5  5  6 ... 11 10 10]
 [ 5  5  6 ... 10  9  9]
 [ 5  5  6 ... 10  9  8]]
```

Original Image

Magnitude Spectrum


```
[[ 8  8  8 ...  5  5  5]
 [ 8  8  8 ...  5  5  5]
 [ 8  8  8 ...  5  5  5]
 ...
 [ 5  5  6 ... 11 10 10]
 [ 5  5  6 ... 10  9  9]
 [ 5  5  6 ... 10  9  8]]
```

1 Start coding or generate with AI.

1 Start coding or generate with AI.

```
1 from scipy.ndimage import convolve
2 import math
3 filter_3x3 = np.array([[-1,-1,-1],[-1,9,-1],[-1,-1,-1]])

4
5 image_double = img.astype(np.float64)
6 filtered_image = convolve(image_double, filter_3x3 , mode='reflect')
7 filtered_image = (filtered_image - np.min(filtered_image)) / (np.max(filtered_image) - np.min(filtered_image))
8
```

```
--------------------------------------------------------------------------
RuntimeError                              Traceback (most recent call last)
<ipython-input-12-13d9164762bc> in <cell line: 6>()
      4
      5 image_double = img.astype(np.float64)
----> 6 filtered_image = convolve(image_double, filter_3x3 , mode='reflect')
      7 filtered_image = (filtered_image - np.min(filtered_image)) /
(np.max(filtered_image) - np.min(filtered_image))

                        ⌄ 1 frames
/usr/local/lib/python3.10/dist-packages/scipy/ndimage/_filters.py in
_correlate_or_convolve(input, weights, output, mode, cval, origin, convolution)
    713         wshape = [ii for ii in weights.shape if ii > 0]
    714         if len(wshape) != input.ndim:
--> 715             raise RuntimeError('filter weights array has incorrect shape.')
    716         if convolution:
    717             weights = weights[tuple([slice(None, None, -1)] * weights.ndim)]

RuntimeError: filter weights array has incorrect shape.
```

```
1 mp.imshow(filtered_image)
2 mp.axis('On')
3 mp.show()
```

```
--------------------------------------------------------------------------
NameError                                 Traceback (most recent call last)
<ipython-input-13-010803f7fabb> in <cell line: 1>()
----> 1 mp.imshow(filtered_image)
      2 mp.axis('On')
      3 mp.show()

NameError: name 'filtered_image' is not defined
```

```
 1 import numpy as np
 2 import matplotlib.pyplot as plt
 3
 4 # Provided array of pixel values
 5 image_array = np.array([1,23,4])
 6
 7 # Convert the array to uint8
 8 # image_array = image_array.astype(np.uint8)
 9
10 # Display the image
11 # plt.imshow(image_array)
12 plt.axis('off')  # Hide axes
13 plt.show()
14
```

```
1  import cv2
2  import numpy as np
3  import matplotlib.pyplot as plt
4  filePath = '/content/drive/MyDrive/glen-carrie-XfA12IEoUkc-unsplash.jpg'
5
6  image = cv2.imread(filePath, cv2.IMREAD_GRAYSCALE)
7
8  equalized_image = cv2.equalizeHist(image)
9
10
11 plt.figure(figsize=(10, 5))
12 plt.subplot(1, 2, 1)
13 plt.title('Original Image')
14 plt.imshow(image, cmap='gray')
15 plt.axis('off')
16
17 plt.subplot(1, 2, 2)
18 plt.title('Equalized Image')
19 plt.imshow(equalized_image, cmap='gray')
20 plt.axis('off')
21
22 plt.show()
23
24 # Display the histograms
25 plt.figure(figsize=(10, 5))
26 plt.subplot(1, 2, 1)
27 plt.title('Histogram of Original Image')
28 plt.hist(image.ravel(), bins=256, range=(0, 256), density=True)
29
30 plt.subplot(1, 2, 2)
31 plt.title('Histogram of Equalized Image')
32 plt.hist(equalized_image.ravel(), bins=256, range=(0, 256), density=True)
33
34 plt.show()
35
```
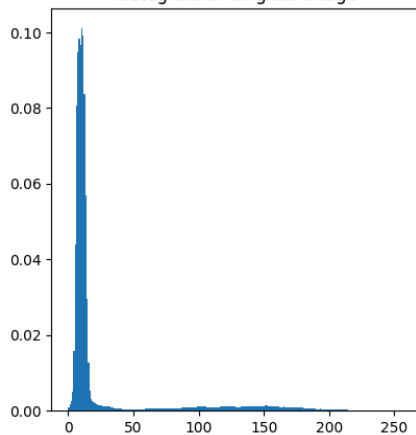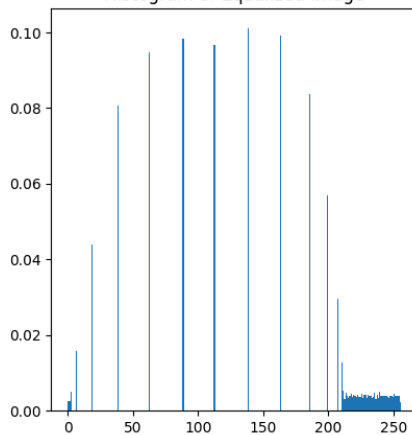
```
1 !sudo apt update
2 !sudo apt install libcairo2-dev ffmpeg \
3     texlive texlive-latex-extra texlive-fonts-extra \
4     texlive-latex-recommended texlive-science \
5     tipa libpango1.0-dev
6 !pip install manim
7 !pip install IPython==8.21.0
```

```
Get:1 https://cloud.r-project.org/bin/linux/ubuntu jammy-cran40/ InRelease [3,626 B]
Hit:2 https://developer.download.nvidia.com/compute/cuda/repos/ubuntu2204/x86_64  InR
Hit:3 http://archive.ubuntu.com/ubuntu jammy InRelease
Get:4 http://security.ubuntu.com/ubuntu jammy-security InRelease [129 kB]
Get:5 http://archive.ubuntu.com/ubuntu jammy-updates InRelease [128 kB]
Hit:6 http://archive.ubuntu.com/ubuntu jammy-backports InRelease
Hit:7 https://ppa.launchpadcontent.net/c2d4u.team/c2d4u4.0+/ubuntu jammy InRelease
Hit:8 https://ppa.launchpadcontent.net/deadsnakes/ppa/ubuntu jammy InRelease
Hit:9 https://ppa.launchpadcontent.net/graphics-drivers/ppa/ubuntu jammy InRelease
Hit:10 https://ppa.launchpadcontent.net/ubuntugis/ppa/ubuntu jammy InRelease
Get:11 http://archive.ubuntu.com/ubuntu jammy-updates/restricted amd64 Packages [2,52
Get:12 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 Packages [2,168 kB]
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 Packages [1,390
Get:14 http://security.ubuntu.com/ubuntu jammy-security/universe amd64 Packages [1,09
Get:15 http://security.ubuntu.com/ubuntu jammy-security/restricted amd64 Packages [2,
Get:16 http://security.ubuntu.com/ubuntu jammy-security/main amd64 Packages [1,896 kB
Fetched 11.8 MB in 4s (2,839 kB/s)
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
52 packages can be upgraded. Run 'apt list --upgradable' to see them.
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
ffmpeg is already the newest version (7:4.4.2-0ubuntu0.22.04.1).
The following additional packages will be installed:
  dvisvgm fonts-adf-accanthis fonts-adf-berenis fonts-adf-gillius
  fonts-adf-universalis fonts-cabin fonts-cantarell fonts-comfortaa
  fonts-croscore fonts-crosextra-caladea fonts-crosextra-carlito
  fonts-dejavu-core fonts-dejavu-extra fonts-droid-fallback fonts-ebgaramond
  fonts-ebgaramond-extra fonts-font-awesome fonts-freefont-otf
  fonts-freefont-ttf fonts-gfs-artemisia fonts-gfs-baskerville
  fonts-gfs-complutum fonts-gfs-didot fonts-gfs-neohellenic fonts-gfs-olga
  fonts-gfs-porson fonts-gfs-solomos fonts-go fonts-junicode fonts-lato
  fonts-linuxlibertine fonts-lmodern fonts-lobster fonts-lobstertwo
  fonts-noto-color-emoji fonts-noto-core fonts-noto-mono fonts-oflb-asana-math
  fonts-open-sans fonts-roboto-unhinted fonts-sil-charis fonts-sil-gentium
  fonts-sil-gentium-basic fonts-sil-gentiumplus fonts-sil-gentiumplus-compact
  fonts-stix fonts-texgyre fonts-urw-base35 gir1.2-freedesktop
  gir1.2-harfbuzz-0.0 gir1.2-pango-1.0 libapache-pom-java libblkid-dev
  libblkid1 libcairo-script-interpreter2 libcommons-logging-java
  libcommons-parent-java libdatrie-dev libffi-dev libfontbox-java libfontenc1
  libfribidi-dev libglib2.0-dev libglib2.0-dev-bin libgraphite2-dev libgs9
  libgs9-common libharfbuzz-dev libharfbuzz-gobject0 libharfbuzz-icu0
  libice-dev libidn12 libijs-0.35 libjbig2dec0 libkpathsea6 liblzo2-2
  libmount-dev libmount1 libpangoxft-1.0-0 libpdfbox-java libpixman-1-dev
  libptexenc1 libruby3.0 libselinux1-dev libsepol-dev libsm-dev libsynctex2
  libteckit0 libtexlua53 libtexluajit2 libthai-dev libwoff1 libxcb-render0-dev
  libxcb-shm0-dev libzzip-0-13 lmodern pango1.0-tools poppler-data
  preview-latex-style rake ruby ruby-net-telnet ruby-rubygems ruby-webrick
  ruby-xmlrpc ruby3.0 rubygems-integration t1utils tex-common tex-gyre
  texlive-base texlive-binaries texlive-fonts-extra-links
  texlive-fonts-recommended texlive-lang-greek texlive-latex-base
  texlive-pictures texlive-plain-generic xfonts-encodings xfonts-utils
Suggested packages:
  fonts-noto fontforge libcairo2-doc libavalon-framework-java
  libcommons-logging-java-doc libexcalibur-logkit-java liblog4j1.2-java
  libdatrie-doc libgirepository1.0-dev libglib2.0-doc libgdk-pixbuf2.0-bin
  | libgdk-pixbuf2.0-dev libxml2-utils libgraphite2-utils libice-doc
  cryptsetup-bin libpango1.0-doc libsm-doc libthai-doc graphicsmagick
  poppler-utils ghostscript fonts-japanese-mincho | fonts-ipafont-mincho
  fonts-japanese-gothic | fonts-ipafont-gothic fonts-arphic-ukai
  fonts-arphic-uming fonts-nanum ri ruby-dev bundler debhelper gv
  | postscript-viewer perl-tk xpdf | pdf-viewer xzdec cm-super
  texlive-fonts-extra-doc texlive-fonts-recommended-doc texlive-latex-base-doc
  python3-pygments icc-profiles libfile-which-perl
  libspreadsheet-parseexcel-perl texlive-latex-extra-doc
  texlive-latex-recommended-doc texlive-luatex texlive-pstricks dot2tex prerex
  texlive-pictures-doc vprerex default-jre-headless texlive-science-doc
  tipa-doc
The following NEW packages will be installed:
  dvisvgm fonts-adf-accanthis fonts-adf-berenis fonts-adf-gillius
  fonts-adf-universalis fonts-cabin fonts-cantarell fonts-comfortaa
  fonts-croscore fonts-crosextra-caladea fonts-crosextra-carlito
  fonts-dejavu-core fonts-dejavu-extra fonts-droid-fallback fonts-ebgaramond
  fonts-ebgaramond-extra fonts-font-awesome fonts-freefont-otf
  fonts-freefont-ttf fonts-gfs-artemisia fonts-gfs-baskerville
  fonts-gfs-complutum fonts-gfs-didot fonts-gfs-neohellenic fonts-gfs-olga
  fonts-gfs-porson fonts-gfs-solomos fonts-go fonts-junicode fonts-lato
  fonts-linuxlibertine fonts-lmodern fonts-lobster fonts-lobstertwo
  fonts-noto-color-emoji fonts-noto-core fonts-noto-mono fonts-oflb-asana-math
  fonts-open-sans fonts-roboto-unhinted fonts-sil-charis fonts-sil-gentium
  fonts-sil-gentium-basic fonts-sil-gentiumplus fonts-sil-gentiumplus-compact
  fonts-stix fonts-texgyre fonts-urw-base35 gir1.2-freedesktop
  gir1.2-harfbuzz-0.0 gir1.2-pango-1.0 libapache-pom-java libblkid-dev
  libcairo-script-interpreter2 libcairo2-dev libcommons-logging-java
  libcommons-parent-java libdatrie-dev libffi-dev libfontbox-java libfontenc1
  libfribidi-dev libglib2.0-dev libglib2.0-dev-bin libgraphite2-dev libgs9
  libgs9-common libharfbuzz-dev libharfbuzz-gobject0 libharfbuzz-icu0
  libice-dev libidn12 libijs-0.35 libjbig2dec0 libkpathsea6 liblzo2-2
```

```
    libmount-dev libpango1.0-dev libpangoxft-1.0-0 libpdfbox-java
    libpixman-1-dev libptexenc1 libruby3.0 libselinux1-dev libsepol-dev
    libsm-dev libsynctex2 libteckit0 libtexlua53 libtexluajit2 libthai-dev
    libwoff1 libxcb-render0-dev libxcb-shm0-dev libzzip-0-13 lmodern
    pango1.0-tools poppler-data preview-latex-style rake ruby ruby-net-telnet
    ruby-rubygems ruby-webrick ruby-xmlrpc ruby3.0 rubygems-integration t1utils
    tex-common tex-gyre texlive texlive-base texlive-binaries
    texlive-fonts-extra texlive-fonts-extra-links texlive-fonts-recommended
    texlive-lang-greek texlive-latex-base texlive-latex-extra
    texlive-latex-recommended texlive-pictures texlive-plain-generic
    texlive-science tipa xfonts-encodings xfonts-utils
The following packages will be upgraded:
    libblkid1 libmount1
2 upgraded, 126 newly installed, 0 to remove and 50 not upgraded.
Need to get 799 MB of archives.
After this operation, 2,228 MB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-droid-fallback all 1:6.
Get:2 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-lato all 2.0-2.1 [2,696
Get:3 http://archive.ubuntu.com/ubuntu jammy/main amd64 poppler-data all 0.4.11-1 [2,
Get:4 http://archive.ubuntu.com/ubuntu jammy/universe amd64 tex-common all 6.17 [33.7
Get:5 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libblkid1 amd64 2.37.
Get:6 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libmount1 amd64 2.37.
Get:7 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-urw-base35 all 20200910
Get:8 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgs9-common all 9.5
Get:9 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libidn12 amd64 1.38-4
Get:10 http://archive.ubuntu.com/ubuntu jammy/main amd64 libijs-0.35 amd64 0.35-15bui
Get:11 http://archive.ubuntu.com/ubuntu jammy/main amd64 libjbig2dec0 amd64 0.19-3bui
Get:12 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libgs9 amd64 9.55.0~
Get:13 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libkpathsea6 amd64 2
Get:14 http://archive.ubuntu.com/ubuntu jammy/main amd64 libwoff1 amd64 1.0.2-1build4
Get:15 http://archive.ubuntu.com/ubuntu jammy/universe amd64 dvisvgm amd64 2.13.1-1 [
Get:16 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-adf-accanthis all
Get:17 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-adf-berenis all 0.
Get:18 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-adf-gillius all 0.
Get:19 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-adf-universalis al
Get:20 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-cabin all 1.5-3 [1
Get:21 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-cantarell all 0.30
Get:22 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-comfortaa all 3.00
Get:23 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-croscore all 20201
Get:24 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-crosextra-caladea
Get:25 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-crosextra-carlito
Get:26 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-dejavu-core all 2.37-2
Get:27 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-dejavu-extra all 2.37-
Get:28 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-ebgaramond all 0.0
Get:29 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-ebgaramond-extra a
Get:30 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-font-awesome all 5.0.1
Get:31 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-freefont-otf all 2
Get:32 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-freefont-ttf all 20120
Get:33 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-artemisia all
Get:34 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-baskerville al
Get:35 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-complutum all
Get:36 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-didot all 1.1-
Get:37 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-neohellenic al
Get:38 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-olga all 1.1-6
Get:39 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-porson all 1.1
Get:40 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-gfs-solomos all 1.
Get:41 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-go all 0~20170330-
Get:42 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-junicode all 1.002
Get:43 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-linuxlibertine all
Get:44 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-lmodern all 2.004.
Get:45 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-lobster all 2.0-2.
Get:46 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-lobstertwo all 2.0
Get:47 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 fonts-noto-color-emo
Get:48 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-noto-core all 20201225
Get:49 http://archive.ubuntu.com/ubuntu jammy/main amd64 fonts-noto-mono all 20201225
Get:50 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-oflb-asana-math al
Get:51 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-open-sans all 1.11
Get:52 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-roboto-unhinted al
Get:53 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-sil-charis all 6.1
Get:54 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-sil-gentium all 20
Get:55 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-sil-gentium-basic
Get:56 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-sil-gentiumplus al
Get:57 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-sil-gentiumplus-co
Get:58 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-texgyre all 201806
Get:59 http://archive.ubuntu.com/ubuntu jammy/main amd64 gir1.2-freedesktop amd64 1.7
Get:60 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 gir1.2-harfbuzz-0.0
Get:61 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpangoxft-1.0-0 am
Get:62 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 gir1.2-pango-1.0 amd
Get:63 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libapache-pom-java all 1
Get:64 http://archive.ubuntu.com/ubuntu jammy/main amd64 liblzo2-2 amd64 2.10-2build3
Get:65 http://archive.ubuntu.com/ubuntu jammy/main amd64 libcairo-script-interpreter2
Get:66 http://archive.ubuntu.com/ubuntu jammy/main amd64 libice-dev amd64 2:1.0.10-1b
Get:67 http://archive.ubuntu.com/ubuntu jammy/main amd64 libsm-dev amd64 2:1.2.3-1bui
Get:68 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpixman-1-dev amd6
Get:69 http://archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-render0-dev amd64 1.1
Get:70 http://archive.ubuntu.com/ubuntu jammy/main amd64 libxcb-shm0-dev amd64 1.14-3
Get:71 http://archive.ubuntu.com/ubuntu jammy/main amd64 libffi-dev amd64 3.4.2-4 [63
Get:72 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libglib2.0-dev-bin a
Get:73 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libblkid-dev amd64 2
Get:74 http://archive.ubuntu.com/ubuntu jammy/main amd64 libsepol-dev amd64 3.3-1buil
Get:75 http://archive.ubuntu.com/ubuntu jammy/main amd64 libselinux1-dev amd64 3.3-1b
```

```
Get:75 http://archive.ubuntu.com/ubuntu jammy/main amd64 libxc11ibx1-dev amd64 9:9-1b
Get:76 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libmount-dev amd64 2
Get:77 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libglib2.0-dev amd64
Get:78 http://archive.ubuntu.com/ubuntu jammy/main amd64 libcairo2-dev amd64 1.16.0-5
Get:79 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libcommons-parent-java a
Get:80 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libcommons-logging-java
Get:81 http://archive.ubuntu.com/ubuntu jammy/main amd64 libdatrie-dev amd64 0.2.13-2
Get:82 http://archive.ubuntu.com/ubuntu jammy/main amd64 libfontenc1 amd64 1:1.1.4-1b
Get:83 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libfribidi-dev amd64
Get:84 http://archive.ubuntu.com/ubuntu jammy/main amd64 libgraphite2-dev amd64 1.3.1
Get:85 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libharfbuzz-icu0 amd
Get:86 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libharfbuzz-gobject0
Get:87 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libharfbuzz-dev amd6
Get:88 http://archive.ubuntu.com/ubuntu jammy/main amd64 libthai-dev amd64 0.1.29-1bu
Get:89 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 pango1.0-tools amd64
Get:90 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libpango1.0-dev amd6
Get:91 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libptexenc1 amd64 20
Get:92 http://archive.ubuntu.com/ubuntu jammy/main amd64 rubygems-integration all 1.1
Get:93 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 ruby3.0 amd64 3.0.2-
Get:94 http://archive.ubuntu.com/ubuntu jammy/main amd64 ruby-rubygems all 3.3.5-2 [2
Get:95 http://archive.ubuntu.com/ubuntu jammy/main amd64 ruby amd64 1:3.0~exp1 [5,100
Get:96 http://archive.ubuntu.com/ubuntu jammy/main amd64 rake all 13.0.6-2 [61.7 kB]
Get:97 http://archive.ubuntu.com/ubuntu jammy/main amd64 ruby-net-telnet all 0.1.1-2
Get:98 http://archive.ubuntu.com/ubuntu jammy/universe amd64 ruby-webrick all 1.7.0-3
Get:99 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 ruby-xmlrpc all 0.3.
Get:100 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libruby3.0 amd64 3.
Get:101 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libsynctex2 amd64 2
Get:102 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libteckit0 amd64 2.5.11
Get:103 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtexlua53 amd64 2
Get:104 http://archive.ubuntu.com/ubuntu jammy-updates/main amd64 libtexluajit2 amd64
Get:105 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libzzip-0-13 amd64 0.13
Get:106 http://archive.ubuntu.com/ubuntu jammy/main amd64 xfonts-encodings all 1:1.0.
Get:107 http://archive.ubuntu.com/ubuntu jammy/main amd64 xfonts-utils amd64 1:7.7+6b
Get:108 http://archive.ubuntu.com/ubuntu jammy/universe amd64 lmodern all 2.004.5-6.1
Get:109 http://archive.ubuntu.com/ubuntu jammy/universe amd64 preview-latex-style all
Get:110 http://archive.ubuntu.com/ubuntu jammy/main amd64 t1utils amd64 1.41-4build2
Get:111 http://archive.ubuntu.com/ubuntu jammy/universe amd64 tex-gyre all 20180621-3
Get:112 http://archive.ubuntu.com/ubuntu jammy-updates/universe amd64 texlive-binarie
Get:113 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-base all 2021.2
Get:114 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-fonts-recommend
Get:115 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-latex-base all
Get:116 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-latex-recommend
Get:117 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive all 2021.202202
Get:118 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-fonts-extra all
Get:119 http://archive.ubuntu.com/ubuntu jammy/universe amd64 fonts-stix all 1.1.1-4.
Get:120 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-fonts-extra-lin
Get:121 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-lang-greek all
Get:122 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libfontbox-java all 1:1
Get:123 http://archive.ubuntu.com/ubuntu jammy/universe amd64 libpdfbox-java all 1:1.
Get:124 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-pictures all 20
Get:125 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-latex-extra all
Get:126 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-plain-generic a
Get:127 http://archive.ubuntu.com/ubuntu jammy/universe amd64 texlive-science all 202
Get:128 http://archive.ubuntu.com/ubuntu jammy/universe amd64 tipa all 2:1.3-21 [2,96
Fetched 799 MB in 15s (54.6 MB/s)
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based frontend ca
debconf: falling back to frontend: Readline
debconf: unable to initialize frontend: Readline
debconf: (This frontend requires a controlling tty.)
debconf: falling back to frontend: Teletype
dpkg-preconfigure: unable to re-open stdin:
Selecting previously unselected package fonts-droid-fallback.
(Reading database ... 121913 files and directories currently installed.)
Preparing to unpack .../fonts-droid-fallback_1%3a6.0.1r16-1.1build1_all.deb ...
Unpacking fonts-droid-fallback (1:6.0.1r16-1.1build1) ...
Selecting previously unselected package fonts-lato.
Preparing to unpack .../fonts-lato_2.0-2.1_all.deb ...
Unpacking fonts-lato (2.0-2.1) ...
Selecting previously unselected package poppler-data.
Preparing to unpack .../poppler-data_0.4.11-1_all.deb ...
Unpacking poppler-data (0.4.11-1) ...
Selecting previously unselected package tex-common.
Preparing to unpack .../tex-common_6.17_all.deb ...
Unpacking tex-common (6.17) ...
Preparing to unpack .../libblkid1_2.37.2-4ubuntu3.4_amd64.deb ...
Unpacking libblkid1:amd64 (2.37.2-4ubuntu3.4) over (2.37.2-4ubuntu3) ...
Setting up libblkid1:amd64 (2.37.2-4ubuntu3.4) ...
(Reading database ... 122533 files and directories currently installed.)
Preparing to unpack .../libmount1_2.37.2-4ubuntu3.4_amd64.deb ...
Unpacking libmount1:amd64 (2.37.2-4ubuntu3.4) over (2.37.2-4ubuntu3) ...
Setting up libmount1:amd64 (2.37.2-4ubuntu3.4) ...
Selecting previously unselected package fonts-urw-base35.
(Reading database ... 122533 files and directories currently installed.)
Preparing to unpack .../000-fonts-urw-base35_20200910-1_all.deb ...
Unpacking fonts-urw-base35 (20200910-1) ...
Selecting previously unselected package libgs9-common.
Preparing to unpack .../001-libgs9-common_9.55.0~dfsg1-0ubuntu5.6_all.deb ...
Unpacking libgs9-common (9.55.0~dfsg1-0ubuntu5.6) ...
Selecting previously unselected package libidn12:amd64.
Preparing to unpack .../002-libidn12_1.38-4ubuntu1_amd64.deb ...
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Unpacking libidn12:amd64 (1.38-4ubuntu1) ...
Selecting previously unselected package libijs-0.35:amd64.
Preparing to unpack .../003-libijs-0.35_0.35-15build2_amd64.deb ...
Unpacking libijs-0.35:amd64 (0.35-15build2) ...
Selecting previously unselected package libjbig2dec0:amd64.
Preparing to unpack .../004-libjbig2dec0_0.19-3build2_amd64.deb ...
Unpacking libjbig2dec0:amd64 (0.19-3build2) ...
Selecting previously unselected package libgs9:amd64.
Preparing to unpack .../005-libgs9_9.55.0~dfsg1-0ubuntu5.6_amd64.deb ...
Unpacking libgs9:amd64 (9.55.0~dfsg1-0ubuntu5.6) ...
Selecting previously unselected package libkpathsea6:amd64.
Preparing to unpack .../006-libkpathsea6_2021.20210626.59705-1ubuntu0.2_amd64.deb ...
Unpacking libkpathsea6:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package libwoff1:amd64.
Preparing to unpack .../007-libwoff1_1.0.2-1build4_amd64.deb ...
Unpacking libwoff1:amd64 (1.0.2-1build4) ...
Selecting previously unselected package dvisvgm.
Preparing to unpack .../008-dvisvgm_2.13.1-1_amd64.deb ...
Unpacking dvisvgm (2.13.1-1) ...
Selecting previously unselected package fonts-adf-accanthis.
Preparing to unpack .../009-fonts-adf-accanthis_0.20190904-2_all.deb ...
Unpacking fonts-adf-accanthis (0.20190904-2) ...
Selecting previously unselected package fonts-adf-berenis.
Preparing to unpack .../010-fonts-adf-berenis_0.20190904-2_all.deb ...
Unpacking fonts-adf-berenis (0.20190904-2) ...
Selecting previously unselected package fonts-adf-gillius.
Preparing to unpack .../011-fonts-adf-gillius_0.20190904-2_all.deb ...
Unpacking fonts-adf-gillius (0.20190904-2) ...
Selecting previously unselected package fonts-adf-universalis.
Preparing to unpack .../012-fonts-adf-universalis_0.20190904-2_all.deb ...
Unpacking fonts-adf-universalis (0.20190904-2) ...
Selecting previously unselected package fonts-cabin.
Preparing to unpack .../013-fonts-cabin_1.5-3_all.deb ...
Unpacking fonts-cabin (1.5-3) ...
Selecting previously unselected package fonts-cantarell.
Preparing to unpack .../014-fonts-cantarell_0.303-2_all.deb ...
Unpacking fonts-cantarell (0.303-2) ...
Selecting previously unselected package fonts-comfortaa.
Preparing to unpack .../015-fonts-comfortaa_3.001-3_all.deb ...
Unpacking fonts-comfortaa (3.001-3) ...
Selecting previously unselected package fonts-croscore.
Preparing to unpack .../016-fonts-croscore_20201225-1build1_all.deb ...
Unpacking fonts-croscore (20201225-1build1) ...
Selecting previously unselected package fonts-crosextra-caladea.
Preparing to unpack .../017-fonts-crosextra-caladea_20130214-2.1_all.deb ...
Unpacking fonts-crosextra-caladea (20130214-2.1) ...
Selecting previously unselected package fonts-crosextra-carlito.
Preparing to unpack .../018-fonts-crosextra-carlito_20130920-1.1_all.deb ...
Unpacking fonts-crosextra-carlito (20130920-1.1) ...
Selecting previously unselected package fonts-dejavu-core.
Preparing to unpack .../019-fonts-dejavu-core_2.37-2build1_all.deb ...
Unpacking fonts-dejavu-core (2.37-2build1) ...
Selecting previously unselected package fonts-dejavu-extra.
Preparing to unpack .../020-fonts-dejavu-extra_2.37-2build1_all.deb ...
Unpacking fonts-dejavu-extra (2.37-2build1) ...
Selecting previously unselected package fonts-ebgaramond.
Preparing to unpack .../021-fonts-ebgaramond_0.016+git20210310.42d4f9f2-1_all.deb ...
Unpacking fonts-ebgaramond (0.016+git20210310.42d4f9f2-1) ...
Selecting previously unselected package fonts-ebgaramond-extra.
Preparing to unpack .../022-fonts-ebgaramond-extra_0.016+git20210310.42d4f9f2-1_all.d
Unpacking fonts-ebgaramond-extra (0.016+git20210310.42d4f9f2-1) ...
Selecting previously unselected package fonts-font-awesome.
Preparing to unpack .../023-fonts-font-awesome_5.0.10+really4.7.0~dfsg-4.1_all.deb ..
Unpacking fonts-font-awesome (5.0.10+really4.7.0~dfsg-4.1) ...
Selecting previously unselected package fonts-freefont-otf.
Preparing to unpack .../024-fonts-freefont-otf_20120503-10build1_all.deb ...
Unpacking fonts-freefont-otf (20120503-10build1) ...
Selecting previously unselected package fonts-freefont-ttf.
Preparing to unpack .../025-fonts-freefont-ttf_20120503-10build1_all.deb ...
Unpacking fonts-freefont-ttf (20120503-10build1) ...
Selecting previously unselected package fonts-gfs-artemisia.
Preparing to unpack .../026-fonts-gfs-artemisia_1.1-6_all.deb ...
Unpacking fonts-gfs-artemisia (1.1-6) ...
Selecting previously unselected package fonts-gfs-baskerville.
Preparing to unpack .../027-fonts-gfs-baskerville_1.1-6_all.deb ...
Unpacking fonts-gfs-baskerville (1.1-6) ...
Selecting previously unselected package fonts-gfs-complutum.
Preparing to unpack .../028-fonts-gfs-complutum_1.1-7_all.deb ...
Unpacking fonts-gfs-complutum (1.1-7) ...
Selecting previously unselected package fonts-gfs-didot.
Preparing to unpack .../029-fonts-gfs-didot_1.1-7_all.deb ...
Unpacking fonts-gfs-didot (1.1-7) ...
Selecting previously unselected package fonts-gfs-neohellenic.
Preparing to unpack .../030-fonts-gfs-neohellenic_1.1-7_all.deb ...
Unpacking fonts-gfs-neohellenic (1.1-7) ...
Selecting previously unselected package fonts-gfs-olga.
Preparing to unpack .../031-fonts-gfs-olga_1.1-6_all.deb ...
Unpacking fonts-gfs-olga (1.1-6) ...
Selecting previously unselected package fonts-gfs-porson.
Preparing to unpack .../032-fonts-gfs-porson_1.1-7_all.deb ...
Unpacking fonts-gfs-porson (1.1-7)
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Unpacking fonts-gfs-porson (1.1.7) ...
Selecting previously unselected package fonts-gfs-solomos.
Preparing to unpack .../033-fonts-gfs-solomos_1.1-6_all.deb ...
Unpacking fonts-gfs-solomos (1.1-6) ...
Selecting previously unselected package fonts-go.
Preparing to unpack .../034-fonts-go_0~20170330-1_all.deb ...
Unpacking fonts-go (0~20170330-1) ...
Selecting previously unselected package fonts-junicode.
Preparing to unpack .../035-fonts-junicode_1.002-2_all.deb ...
Unpacking fonts-junicode (1.002-2) ...
Selecting previously unselected package fonts-linuxlibertine.
Preparing to unpack .../036-fonts-linuxlibertine_5.3.0-6_all.deb ...
Unpacking fonts-linuxlibertine (5.3.0-6) ...
Selecting previously unselected package fonts-lmodern.
Preparing to unpack .../037-fonts-lmodern_2.004.5-6.1_all.deb ...
Unpacking fonts-lmodern (2.004.5-6.1) ...
Selecting previously unselected package fonts-lobster.
Preparing to unpack .../038-fonts-lobster_2.0-2.1_all.deb ...
Unpacking fonts-lobster (2.0-2.1) ...
Selecting previously unselected package fonts-lobstertwo.
Preparing to unpack .../039-fonts-lobstertwo_2.0-2.1_all.deb ...
Unpacking fonts-lobstertwo (2.0-2.1) ...
Selecting previously unselected package fonts-noto-color-emoji.
Preparing to unpack .../040-fonts-noto-color-emoji_2.042-0ubuntu0.22.04.1_all.deb ...
Unpacking fonts-noto-color-emoji (2.042-0ubuntu0.22.04.1) ...
Selecting previously unselected package fonts-noto-core.
Preparing to unpack .../041-fonts-noto-core_20201225-1build1_all.deb ...
Unpacking fonts-noto-core (20201225-1build1) ...
Selecting previously unselected package fonts-noto-mono.
Preparing to unpack .../042-fonts-noto-mono_20201225-1build1_all.deb ...
Unpacking fonts-noto-mono (20201225-1build1) ...
Selecting previously unselected package fonts-oflb-asana-math.
Preparing to unpack .../043-fonts-oflb-asana-math_000.907-7build1_all.deb ...
Unpacking fonts-oflb-asana-math (000.907-7build1) ...
Selecting previously unselected package fonts-open-sans.
Preparing to unpack .../044-fonts-open-sans_1.11-2_all.deb ...
Unpacking fonts-open-sans (1.11-2) ...
Selecting previously unselected package fonts-roboto-unhinted.
Preparing to unpack .../045-fonts-roboto-unhinted_2%3a0~20170802-3_all.deb ...
Unpacking fonts-roboto-unhinted (2:0~20170802-3) ...
Selecting previously unselected package fonts-sil-charis.
Preparing to unpack .../046-fonts-sil-charis_6.101-1_all.deb ...
Unpacking fonts-sil-charis (6.101-1) ...
Selecting previously unselected package fonts-sil-gentium.
Preparing to unpack .../047-fonts-sil-gentium_20081126%3a1.03-4_all.deb ...
Unpacking fonts-sil-gentium (20081126:1.03-4) ...
Selecting previously unselected package fonts-sil-gentium-basic.
Preparing to unpack .../048-fonts-sil-gentium-basic_1.102-1.1_all.deb ...
Unpacking fonts-sil-gentium-basic (1.102-1.1) ...
Selecting previously unselected package fonts-sil-gentiumplus.
Preparing to unpack .../049-fonts-sil-gentiumplus_6.101-1_all.deb ...
Unpacking fonts-sil-gentiumplus (6.101-1) ...
Selecting previously unselected package fonts-sil-gentiumplus-compact.
Preparing to unpack .../050-fonts-sil-gentiumplus-compact_5.000-4_all.deb ...
Unpacking fonts-sil-gentiumplus-compact (5.000-4) ...
Selecting previously unselected package fonts-texgyre.
Preparing to unpack .../051-fonts-texgyre_20180621-3.1_all.deb ...
Unpacking fonts-texgyre (20180621-3.1) ...
Selecting previously unselected package gir1.2-freedesktop:amd64.
Preparing to unpack .../052-gir1.2-freedesktop_1.72.0-1_amd64.deb ...
Unpacking gir1.2-freedesktop:amd64 (1.72.0-1) ...
Selecting previously unselected package gir1.2-harfbuzz-0.0:amd64.
Preparing to unpack .../053-gir1.2-harfbuzz-0.0_2.7.4-1ubuntu3.1_amd64.deb ...
Unpacking gir1.2-harfbuzz-0.0:amd64 (2.7.4-1ubuntu3.1) ...
Selecting previously unselected package libpangoxft-1.0-0:amd64.
Preparing to unpack .../054-libpangoxft-1.0-0_1.50.6+ds-2ubuntu1_amd64.deb ...
Unpacking libpangoxft-1.0-0:amd64 (1.50.6+ds-2ubuntu1) ...
Selecting previously unselected package gir1.2-pango-1.0:amd64.
Preparing to unpack .../055-gir1.2-pango-1.0_1.50.6+ds-2ubuntu1_amd64.deb ...
Unpacking gir1.2-pango-1.0:amd64 (1.50.6+ds-2ubuntu1) ...
Selecting previously unselected package libapache-pom-java.
Preparing to unpack .../056-libapache-pom-java_18-1_all.deb ...
Unpacking libapache-pom-java (18-1) ...
Selecting previously unselected package liblzo2-2:amd64.
Preparing to unpack .../057-liblzo2-2_2.10-2build3_amd64.deb ...
Unpacking liblzo2-2:amd64 (2.10-2build3) ...
Selecting previously unselected package libcairo-script-interpreter2:amd64.
Preparing to unpack .../058-libcairo-script-interpreter2_1.16.0-5ubuntu2_amd64.deb ..
Unpacking libcairo-script-interpreter2:amd64 (1.16.0-5ubuntu2) ...
Selecting previously unselected package libice-dev:amd64.
Preparing to unpack .../059-libice-dev_2%3a1.0.10-1build2_amd64.deb ...
Unpacking libice-dev:amd64 (2:1.0.10-1build2) ...
Selecting previously unselected package libsm-dev:amd64.
Preparing to unpack .../060-libsm-dev_2%3a1.2.3-1build2_amd64.deb ...
Unpacking libsm-dev:amd64 (2:1.2.3-1build2) ...
Selecting previously unselected package libpixman-1-dev:amd64.
Preparing to unpack .../061-libpixman-1-dev_0.40.0-1ubuntu0.22.04.1_amd64.deb ...
Unpacking libpixman-1-dev:amd64 (0.40.0-1ubuntu0.22.04.1) ...
Selecting previously unselected package libxcb-render0-dev:amd64.
Preparing to unpack .../062-libxcb-render0-dev_1.14-3ubuntu3_amd64.deb ...
Unpacking libxcb-render0-dev:amd64 (1.14-3ubuntu3) ...
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Selecting previously unselected package libxcb-shm0-dev:amd64.
Preparing to unpack .../063-libxcb-shm0-dev_1.14-3ubuntu3_amd64.deb ...
Unpacking libxcb-shm0-dev:amd64 (1.14-3ubuntu3) ...
Selecting previously unselected package libffi-dev:amd64.
Preparing to unpack .../064-libffi-dev_3.4.2-4_amd64.deb ...
Unpacking libffi-dev:amd64 (3.4.2-4) ...
Selecting previously unselected package libglib2.0-dev-bin.
Preparing to unpack .../065-libglib2.0-dev-bin_2.72.4-0ubuntu2.3_amd64.deb ...
Unpacking libglib2.0-dev-bin (2.72.4-0ubuntu2.3) ...
Selecting previously unselected package libblkid-dev:amd64.
Preparing to unpack .../066-libblkid-dev_2.37.2-4ubuntu3.4_amd64.deb ...
Unpacking libblkid-dev:amd64 (2.37.2-4ubuntu3.4) ...
Selecting previously unselected package libsepol-dev:amd64.
Preparing to unpack .../067-libsepol-dev_3.3-1build1_amd64.deb ...
Unpacking libsepol-dev:amd64 (3.3-1build1) ...
Selecting previously unselected package libselinux1-dev:amd64.
Preparing to unpack .../068-libselinux1-dev_3.3-1build2_amd64.deb ...
Unpacking libselinux1-dev:amd64 (3.3-1build2) ...
Selecting previously unselected package libmount-dev:amd64.
Preparing to unpack .../069-libmount-dev_2.37.2-4ubuntu3.4_amd64.deb ...
Unpacking libmount-dev:amd64 (2.37.2-4ubuntu3.4) ...
Selecting previously unselected package libglib2.0-dev:amd64.
Preparing to unpack .../070-libglib2.0-dev_2.72.4-0ubuntu2.3_amd64.deb ...
Unpacking libglib2.0-dev:amd64 (2.72.4-0ubuntu2.3) ...
Selecting previously unselected package libcairo2-dev:amd64.
Preparing to unpack .../071-libcairo2-dev_1.16.0-5ubuntu2_amd64.deb ...
Unpacking libcairo2-dev:amd64 (1.16.0-5ubuntu2) ...
Selecting previously unselected package libcommons-parent-java.
Preparing to unpack .../072-libcommons-parent-java_43-1_all.deb ...
Unpacking libcommons-parent-java (43-1) ...
Selecting previously unselected package libcommons-logging-java.
Preparing to unpack .../073-libcommons-logging-java_1.2-2_all.deb ...
Unpacking libcommons-logging-java (1.2-2) ...
Selecting previously unselected package libdatrie-dev:amd64.
Preparing to unpack .../074-libdatrie-dev_0.2.13-2_amd64.deb ...
Unpacking libdatrie-dev:amd64 (0.2.13-2) ...
Selecting previously unselected package libfontenc1:amd64.
Preparing to unpack .../075-libfontenc1_1%3a1.1.4-1build3_amd64.deb ...
Unpacking libfontenc1:amd64 (1:1.1.4-1build3) ...
Selecting previously unselected package libfribidi-dev:amd64.
Preparing to unpack .../076-libfribidi-dev_1.0.8-2ubuntu3.1_amd64.deb ...
Unpacking libfribidi-dev:amd64 (1.0.8-2ubuntu3.1) ...
Selecting previously unselected package libgraphite2-dev:amd64.
Preparing to unpack .../077-libgraphite2-dev_1.3.14-1build2_amd64.deb ...
Unpacking libgraphite2-dev:amd64 (1.3.14-1build2) ...
Selecting previously unselected package libharfbuzz-icu0:amd64.
Preparing to unpack .../078-libharfbuzz-icu0_2.7.4-1ubuntu3.1_amd64.deb ...
Unpacking libharfbuzz-icu0:amd64 (2.7.4-1ubuntu3.1) ...
Selecting previously unselected package libharfbuzz-gobject0:amd64.
Preparing to unpack .../079-libharfbuzz-gobject0_2.7.4-1ubuntu3.1_amd64.deb ...
Unpacking libharfbuzz-gobject0:amd64 (2.7.4-1ubuntu3.1) ...
Selecting previously unselected package libharfbuzz-dev:amd64.
Preparing to unpack .../080-libharfbuzz-dev_2.7.4-1ubuntu3.1_amd64.deb ...
Unpacking libharfbuzz-dev:amd64 (2.7.4-1ubuntu3.1) ...
Selecting previously unselected package libthai-dev:amd64.
Preparing to unpack .../081-libthai-dev_0.1.29-1build1_amd64.deb ...
Unpacking libthai-dev:amd64 (0.1.29-1build1) ...
Selecting previously unselected package pango1.0-tools.
Preparing to unpack .../082-pango1.0-tools_1.50.6+ds-2ubuntu1_amd64.deb ...
Unpacking pango1.0-tools (1.50.6+ds-2ubuntu1) ...
Selecting previously unselected package libpango1.0-dev:amd64.
Preparing to unpack .../083-libpango1.0-dev_1.50.6+ds-2ubuntu1_amd64.deb ...
Unpacking libpango1.0-dev:amd64 (1.50.6+ds-2ubuntu1) ...
Selecting previously unselected package libptexenc1:amd64.
Preparing to unpack .../084-libptexenc1_2021.20210626.59705-1ubuntu0.2_amd64.deb ...
Unpacking libptexenc1:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package rubygems-integration.
Preparing to unpack .../085-rubygems-integration_1.18_all.deb ...
Unpacking rubygems-integration (1.18) ...
Selecting previously unselected package ruby3.0.
Preparing to unpack .../086-ruby3.0_3.0.2-7ubuntu2.5_amd64.deb ...
Unpacking ruby3.0 (3.0.2-7ubuntu2.5) ...
Selecting previously unselected package ruby-rubygems.
Preparing to unpack .../087-ruby-rubygems_3.3.5-2_all.deb ...
Unpacking ruby-rubygems (3.3.5-2) ...
Selecting previously unselected package ruby.
Preparing to unpack .../088-ruby_1%3a3.0~exp1_amd64.deb ...
Unpacking ruby (1:3.0~exp1) ...
Selecting previously unselected package rake.
Preparing to unpack .../089-rake_13.0.6-2_all.deb ...
Unpacking rake (13.0.6-2) ...
Selecting previously unselected package ruby-net-telnet.
Preparing to unpack .../090-ruby-net-telnet_0.1.1-2_all.deb ...
Unpacking ruby-net-telnet (0.1.1-2) ...
Selecting previously unselected package ruby-webrick.
Preparing to unpack .../091-ruby-webrick_1.7.0-3_all.deb ...
Unpacking ruby-webrick (1.7.0-3) ...
Selecting previously unselected package ruby-xmlrpc.
Preparing to unpack .../092-ruby-xmlrpc_0.3.2-1ubuntu0.1_all.deb ...
Unpacking ruby-xmlrpc (0.3.2-1ubuntu0.1) ...
Selecting previously unselected package libruby3.0:amd64.
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Selecting previously unselected package libruby3.0:amd64.
Preparing to unpack .../093-libruby3.0_3.0.2-7ubuntu2.5_amd64.deb ...
Unpacking libruby3.0:amd64 (3.0.2-7ubuntu2.5) ...
Selecting previously unselected package libsynctex2:amd64.
Preparing to unpack .../094-libsynctex2_2021.20210626.59705-1ubuntu0.2_amd64.deb ...
Unpacking libsynctex2:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package libteckit0:amd64.
Preparing to unpack .../095-libteckit0_2.5.11+ds1-1_amd64.deb ...
Unpacking libteckit0:amd64 (2.5.11+ds1-1) ...
Selecting previously unselected package libtexlua53:amd64.
Preparing to unpack .../096-libtexlua53_2021.20210626.59705-1ubuntu0.2_amd64.deb ...
Unpacking libtexlua53:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package libtexluajit2:amd64.
Preparing to unpack .../097-libtexluajit2_2021.20210626.59705-1ubuntu0.2_amd64.deb ..
Unpacking libtexluajit2:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package libzzip-0-13:amd64.
Preparing to unpack .../098-libzzip-0-13_0.13.72+dfsg.1-1.1_amd64.deb ...
Unpacking libzzip-0-13:amd64 (0.13.72+dfsg.1-1.1) ...
Selecting previously unselected package xfonts-encodings.
Preparing to unpack .../099-xfonts-encodings_1%3a1.0.5-0ubuntu2_all.deb ...
Unpacking xfonts-encodings (1:1.0.5-0ubuntu2) ...
Selecting previously unselected package xfonts-utils.
Preparing to unpack .../100-xfonts-utils_1%3a7.7+6build2_amd64.deb ...
Unpacking xfonts-utils (1:7.7+6build2) ...
Selecting previously unselected package lmodern.
Preparing to unpack .../101-lmodern_2.004.5-6.1_all.deb ...
Unpacking lmodern (2.004.5-6.1) ...
Selecting previously unselected package preview-latex-style.
Preparing to unpack .../102-preview-latex-style_12.2-1ubuntu1_all.deb ...
Unpacking preview-latex-style (12.2-1ubuntu1) ...
Selecting previously unselected package t1utils.
Preparing to unpack .../103-t1utils_1.41-4build2_amd64.deb ...
Unpacking t1utils (1.41-4build2) ...
Selecting previously unselected package tex-gyre.
Preparing to unpack .../104-tex-gyre_20180621-3.1_all.deb ...
Unpacking tex-gyre (20180621-3.1) ...
Selecting previously unselected package texlive-binaries.
Preparing to unpack .../105-texlive-binaries_2021.20210626.59705-1ubuntu0.2_amd64.deb
Unpacking texlive-binaries (2021.20210626.59705-1ubuntu0.2) ...
Selecting previously unselected package texlive-base.
Preparing to unpack .../106-texlive-base_2021.20220204-1_all.deb ...
Unpacking texlive-base (2021.20220204-1) ...
Selecting previously unselected package texlive-fonts-recommended.
Preparing to unpack .../107-texlive-fonts-recommended_2021.20220204-1_all.deb ...
Unpacking texlive-fonts-recommended (2021.20220204-1) ...
Selecting previously unselected package texlive-latex-base.
Preparing to unpack .../108-texlive-latex-base_2021.20220204-1_all.deb ...
Unpacking texlive-latex-base (2021.20220204-1) ...
Selecting previously unselected package texlive-latex-recommended.
Preparing to unpack .../109-texlive-latex-recommended_2021.20220204-1_all.deb ...
Unpacking texlive-latex-recommended (2021.20220204-1) ...
Selecting previously unselected package texlive.
Preparing to unpack .../110-texlive_2021.20220204-1_all.deb ...
Unpacking texlive (2021.20220204-1) ...
Selecting previously unselected package texlive-fonts-extra.
Preparing to unpack .../111-texlive-fonts-extra_2021.20220204-1_all.deb ...
Unpacking texlive-fonts-extra (2021.20220204-1) ...
Selecting previously unselected package fonts-stix.
Preparing to unpack .../112-fonts-stix_1.1.1-4.1_all.deb ...
Unpacking fonts-stix (1.1.1-4.1) ...
Selecting previously unselected package texlive-fonts-extra-links.
Preparing to unpack .../113-texlive-fonts-extra-links_2021.20220204-1_all.deb ...
Unpacking texlive-fonts-extra-links (2021.20220204-1) ...
Selecting previously unselected package texlive-lang-greek.
Preparing to unpack .../114-texlive-lang-greek_2021.20220204-1_all.deb ...
Unpacking texlive-lang-greek (2021.20220204-1) ...
Selecting previously unselected package libfontbox-java.
Preparing to unpack .../115-libfontbox-java_1%3a1.8.16-2_all.deb ...
Unpacking libfontbox-java (1:1.8.16-2) ...
Selecting previously unselected package libpdfbox-java.
Preparing to unpack .../116-libpdfbox-java_1%3a1.8.16-2_all.deb ...
Unpacking libpdfbox-java (1:1.8.16-2) ...
Selecting previously unselected package texlive-pictures.
Preparing to unpack .../117-texlive-pictures_2021.20220204-1_all.deb ...
Unpacking texlive-pictures (2021.20220204-1) ...
Selecting previously unselected package texlive-latex-extra.
Preparing to unpack .../118-texlive-latex-extra_2021.20220204-1_all.deb ...
Unpacking texlive-latex-extra (2021.20220204-1) ...
Selecting previously unselected package texlive-plain-generic.
Preparing to unpack .../119-texlive-plain-generic_2021.20220204-1_all.deb ...
Unpacking texlive-plain-generic (2021.20220204-1) ...
Selecting previously unselected package texlive-science.
Preparing to unpack .../120-texlive-science_2021.20220204-1_all.deb ...
Unpacking texlive-science (2021.20220204-1) ...
Selecting previously unselected package tipa.
Preparing to unpack .../121-tipa_2%3a1.3-21_all.deb ...
Unpacking tipa (2:1.3-21) ...
Setting up libglib2.0-dev-bin (2.72.4-0ubuntu2.3) ...
Setting up fonts-gfs-didot (1.1-7) ...
Setting up fonts-gfs-artemisia (1.1-6) ...
Setting up libblkid-dev:amd64 (2.37.2-4ubuntu3.4) ...
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        Setting up fonts-sil-gentium-basic (1.102-1.1) ...
        Setting up fonts-cantarell (0.303-2) ...
        Setting up gir1.2-freedesktop:amd64 (1.72.0-1) ...
        Setting up fonts-ebgaramond (0.016+git20210310.42d4f9f2-1) ...
        Setting up libharfbuzz-icu0:amd64 (2.7.4-1ubuntu3.1) ...
        Setting up fonts-lato (2.0-2.1) ...
        Setting up libpixman-1-dev:amd64 (0.40.0-1ubuntu0.22.04.1) ...
        Setting up fonts-junicode (1.002-2) ...
        Setting up fonts-noto-mono (20201225-1build1) ...
        Setting up libpangoxft-1.0-0:amd64 (1.50.6+ds-2ubuntu1) ...
        Setting up fonts-gfs-porson (1.1-7) ...
        Setting up libwoff1:amd64 (1.0.2-1build4) ...
        Setting up libice-dev:amd64 (2:1.0.10-1build2) ...
        Setting up fonts-noto-color-emoji (2.042-0ubuntu0.22.04.1) ...
        Setting up libtexlua53:amd64 (2021.20210626.59705-1ubuntu0.2) ...
        Setting up libsm-dev:amd64 (2:1.2.3-1build2) ...
        Setting up fonts-adf-berenis (0.20190904-2) ...
        Setting up libijs-0.35:amd64 (0.35-15build2) ...
        Setting up libfribidi-dev:amd64 (1.0.8-2ubuntu3.1) ...
        Setting up libtexluajit2:amd64 (2021.20210626.59705-1ubuntu0.2) ...
        Setting up libfontbox-java (1:1.8.16-2) ...
        Setting up fonts-freefont-otf (20120503-10build1) ...
        Setting up pango1.0-tools (1.50.6+ds-2ubuntu1) ...
        Setting up fonts-freefont-ttf (20120503-10build1) ...
        Setting up fonts-gfs-solomos (1.1-6) ...
        Setting up fonts-comfortaa (3.001-3) ...
        Setting up liblzo2-2:amd64 (2.10-2build3) ...
        Setting up rubygems-integration (1.18) ...
        Setting up libzzip-0-13:amd64 (0.13.72+dfsg.1-1.1) ...
        Setting up fonts-sil-gentiumplus-compact (5.000-4) ...
        Setting up libharfbuzz-gobject0:amd64 (2.7.4-1ubuntu3.1) ...
        Setting up fonts-roboto-unhinted (2:0~20170802-3) ...
        Setting up fonts-urw-base35 (20200910-1) ...
        Setting up fonts-open-sans (1.11-2) ...
        Setting up fonts-sil-gentiumplus (6.101-1) ...
        Setting up libffi-dev:amd64 (3.4.2-4) ...
        Setting up gir1.2-harfbuzz-0.0:amd64 (2.7.4-1ubuntu3.1) ...
        Setting up fonts-gfs-neohellenic (1.1-7) ...
        Setting up fonts-gfs-olga (1.1-6) ...
        Setting up fonts-oflb-asana-math (000.907-7build1) ...
        Setting up poppler-data (0.4.11-1) ...
        Setting up fonts-crosextra-carlito (20130920-1.1) ...
        Setting up fonts-adf-accanthis (0.20190904-2) ...
        Setting up tex-common (6.17) ...
        debconf: unable to initialize frontend: Dialog
        debconf: (No usable dialog-like program is installed, so the dialog based frontend ca
        debconf: falling back to frontend: Readline
        update-language: texlive-base not installed and configured, doing nothing!
        Setting up fonts-sil-gentium (20081126:1.03-4) ...
        Setting up libxcb-shm0-dev:amd64 (1.14-3ubuntu3) ...
        Setting up fonts-adf-universalis (0.20190904-2) ...
        Setting up libgraphite2-dev:amd64 (1.3.14-1build2) ...
        Setting up libfontenc1:amd64 (1:1.1.4-1build3) ...
        Setting up gir1.2-pango-1.0:amd64 (1.50.6+ds-2ubuntu1) ...
        Setting up fonts-stix (1.1.1-4.1) ...
        Setting up fonts-sil-charis (6.101-1) ...
        Setting up libjbig2dec0:amd64 (0.19-3build2) ...
        Setting up fonts-go (0~20170330-1) ...
        Setting up libteckit0:amd64 (2.5.11+ds1-1) ...
        Setting up libapache-pom-java (18-1) ...
        Setting up ruby-net-telnet (0.1.1-2) ...
        Setting up fonts-cabin (1.5-3) ...
        Setting up xfonts-encodings (1:1.0.5-0ubuntu2) ...
        Setting up t1utils (1.41-4build2) ...
        Setting up libidn12:amd64 (1.38-4ubuntu1) ...
        Setting up fonts-dejavu-core (2.37-2build1) ...
        Setting up libsepol-dev:amd64 (3.3-1build1) ...
        Setting up libxcb-render0-dev:amd64 (1.14-3ubuntu3) ...
        Setting up fonts-texgyre (20180621-3.1) ...
        Setting up fonts-linuxlibertine (5.3.0-6) ...
        Setting up libkpathsea6:amd64 (2021.20210626.59705-1ubuntu0.2) ...
        Setting up fonts-croscore (20201225-1build1) ...
        Setting up ruby-webrick (1.7.0-3) ...
        Setting up fonts-dejavu-extra (2.37-2build1) ...
        Setting up libdatrie-dev:amd64 (0.2.13-2) ...
        Setting up fonts-gfs-baskerville (1.1-6) ...
        Setting up fonts-gfs-complutum (1.1-7) ...
        Setting up fonts-crosextra-caladea (20130214-2.1) ...
        Setting up fonts-lmodern (2.004.5-6.1) ...
        Setting up fonts-ebgaramond-extra (0.016+git20210310.42d4f9f2-1) ...
        Setting up fonts-lobster (2.0-2.1) ...
        Setting up fonts-droid-fallback (1:6.0.1r16-1.1build1) ...
        Setting up fonts-adf-gillius (0.20190904-2) ...
        Setting up ruby-xmlrpc (0.3.2-1ubuntu0.1) ...
        Setting up fonts-noto-core (20201225-1build1) ...
        Setting up fonts-font-awesome (5.0.10+really4.7.0~dfsg-4.1) ...
        Setting up libsynctex2:amd64 (2021.20210626.59705-1ubuntu0.2) ...
        Setting up libgs9-common (9.55.0~dfsg1-0ubuntu5.6) ...
        Setting up libcairo-script-interpreter2:amd64 (1.16.0-5ubuntu2) ...
        Setting up libpdfbox-java (1:1.8.16-2) ...
        Setting up libgs9:amd64 (9.55.0~dfsg1-0ubuntu5.6) ...
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Setting up libg35:amd64 (9.99.0 dfsg1 0ubuntu3.6) ...
Setting up libselinux1-dev:amd64 (3.3-1build2) ...
Setting up preview-latex-style (12.2-1ubuntu1) ...
Setting up libcommons-parent-java (43-1) ...
Setting up dvisvgm (2.13.1-1) ...
Setting up libcommons-logging-java (1.2-2) ...
Setting up xfonts-utils (1:7.7+6build2) ...
Setting up fonts-lobstertwo (2.0-2.1) ...
Setting up libptexenc1:amd64 (2021.20210626.59705-1ubuntu0.2) ...
Setting up texlive-fonts-extra-links (2021.20220204-1) ...
Setting up libthai-dev:amd64 (0.1.29-1build1) ...
Setting up texlive-binaries (2021.20210626.59705-1ubuntu0.2) ...
update-alternatives: using /usr/bin/xdvi-xaw to provide /usr/bin/xdvi.bin (xdvi.bin)
update-alternatives: using /usr/bin/bibtex.original to provide /usr/bin/bibtex (bibte
Setting up lmodern (2.004.5-6.1) ...
Setting up texlive-base (2021.20220204-1) ...
/usr/bin/ucfr
/usr/bin/ucfr
/usr/bin/ucfr
/usr/bin/ucfr
mktexlsr: Updating /var/lib/texmf/ls-R-TEXLIVEDIST...
mktexlsr: Updating /var/lib/texmf/ls-R-TEXMFMAIN...
mktexlsr: Updating /var/lib/texmf/ls-R...
mktexlsr: Done.
tl-paper: setting paper size for dvips to a4: /var/lib/texmf/dvips/config/config-pape
tl-paper: setting paper size for dvipdfmx to a4: /var/lib/texmf/dvipdfmx/dvipdfmx-pap
tl-paper: setting paper size for xdvi to a4: /var/lib/texmf/xdvi/XDvi-paper
tl-paper: setting paper size for pdftex to a4: /var/lib/texmf/tex/generic/tex-ini-fil
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based frontend ca
debconf: falling back to frontend: Readline
Setting up tex-gyre (20180621-3.1) ...
Setting up libmount-dev:amd64 (2.37.2-4ubuntu3.4) ...
Setting up texlive-plain-generic (2021.20220204-1) ...
Setting up texlive-lang-greek (2021.20220204-1) ...
Setting up libglib2.0-dev:amd64 (2.72.4-0ubuntu2.3) ...
Setting up texlive-latex-base (2021.20220204-1) ...
Setting up texlive-fonts-extra (2021.20220204-1) ...
Setting up texlive-latex-recommended (2021.20220204-1) ...
Setting up texlive-pictures (2021.20220204-1) ...
Setting up texlive-fonts-recommended (2021.20220204-1) ...
Setting up tipa (2:1.3-21) ...
Setting up texlive (2021.20220204-1) ...
Setting up texlive-science (2021.20220204-1) ...
Setting up texlive-latex-extra (2021.20220204-1) ...
Setting up libruby3.0:amd64 (3.0.2-7ubuntu2.5) ...
Setting up ruby3.0 (3.0.2-7ubuntu2.5) ...
Setting up ruby (1:3.0~exp1) ...
Setting up rake (13.0.6-2) ...
Setting up ruby-rubygems (3.3.5-2) ...
Processing triggers for man-db (2.10.2-1) ...
Processing triggers for fontconfig (2.13.1-4.2ubuntu5) ...
Processing triggers for libglib2.0-0:amd64 (2.72.4-0ubuntu2.3) ...
Processing triggers for libc-bin (2.35-0ubuntu3.4) ...
/sbin/ldconfig.real: /usr/local/lib/libtbbbind_2_0.so.3 is not a symbolic link

/sbin/ldconfig.real: /usr/local/lib/libtbb.so.12 is not a symbolic link

/sbin/ldconfig.real: /usr/local/lib/libtbbbind.so.3 is not a symbolic link

/sbin/ldconfig.real: /usr/local/lib/libtbbbind_2_5.so.3 is not a symbolic link

/sbin/ldconfig.real: /usr/local/lib/libtbbmalloc_proxy.so.2 is not a symbolic link

/sbin/ldconfig.real: /usr/local/lib/libtbbmalloc.so.2 is not a symbolic link

Setting up libcairo2-dev:amd64 (1.16.0-5ubuntu2) ...
Setting up libharfbuzz-dev:amd64 (2.7.4-1ubuntu3.1) ...
Setting up libpango1.0-dev:amd64 (1.50.6+ds-2ubuntu1) ...
Processing triggers for tex-common (6.17) ...
debconf: unable to initialize frontend: Dialog
debconf: (No usable dialog-like program is installed, so the dialog based frontend ca
debconf: falling back to frontend: Readline
Running updmap-sys. This may take some time... done.
Running mktexlsr /var/lib/texmf ... done.
Building format(s) --all.
        This may take some time... done.
Collecting manim
  Downloading manim-0.18.1-py3-none-any.whl (585 kB)
  ──────────────────────────────────────── 585.2/585.2 kB 3.7 MB/s eta 0:00:00
Requirement already satisfied: Pillow>=9.1 in /usr/local/lib/python3.10/dist-packages
Requirement already satisfied: Pygments>=2.0.0 in /usr/local/lib/python3.10/dist-pack
Requirement already satisfied: click>=8.0 in /usr/local/lib/python3.10/dist-packages
Collecting cloup>=2.0.0 (from manim)
  Downloading cloup-3.0.5-py2.py3-none-any.whl (54 kB)
  ──────────────────────────────────────── 54.4/54.4 kB 6.6 MB/s eta 0:00:00
Requirement already satisfied: decorator>=4.3.2 in /usr/local/lib/python3.10/dist-pac
Collecting isosurfaces>=0.1.0 (from manim)
  Downloading isosurfaces-0.1.2-py3-none-any.whl (11 kB)
Collecting manimpango<1.0.0,>=0.5.0 (from manim)
  Downloading ManimPango-0.5.0.tar.gz (4.1 MB)
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                    ──────────────────────────── 4.1/4.1 MB 31.8 MB/s eta 0:00:00
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Preparing metadata (pyproject.toml) ... done
Collecting mapbox-earcut>=1.0.0 (from manim)
  Downloading mapbox_earcut-1.0.1-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86
                    ──────────────────────────── 104.9/104.9 kB 10.8 MB/s eta 0:00:00
Collecting moderngl<6.0.0,>=5.0.0 (from manim)
  Downloading moderngl-5.10.0-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.
                    ──────────────────────────── 267.7/267.7 kB 18.9 MB/s eta 0:00:00
Collecting moderngl-window>=2.0.0 (from manim)
  Downloading moderngl_window-2.4.6-py3-none-any.whl (370 kB)
                    ──────────────────────────── 370.6/370.6 kB 30.8 MB/s eta 0:00:00
Requirement already satisfied: networkx>=2.6 in /usr/local/lib/python3.10/dist-packag
Collecting numpy>=1.26 (from manim)
  Downloading numpy-1.26.4-cp310-cp310-manylinux_2_17_x86_64.manylinux2014_x86_64.whl
                    ──────────────────────────── 18.2/18.2 MB 51.5 MB/s eta 0:00:00
Collecting pycairo<2.0.0,>=1.13 (from manim)
  Downloading pycairo-1.26.0.tar.gz (346 kB)
                    ──────────────────────────── 346.9/346.9 kB 27.6 MB/s eta 0:00:00
  Installing build dependencies ... done
  Getting requirements to build wheel ... done
  Installing backend dependencies ... done
  Preparing metadata (pyproject.toml) ... done
Collecting pydub>=0.20.0 (from manim)
  Downloading pydub-0.25.1-py2.py3-none-any.whl (32 kB)
Requirement already satisfied: rich>=12.0.0 in /usr/local/lib/python3.10/dist-package
Requirement already satisfied: scipy>=1.6.0 in /usr/local/lib/python3.10/dist-package
Collecting screeninfo>=0.7 (from manim)
  Downloading screeninfo-0.8.1-py3-none-any.whl (12 kB)
Collecting skia-pathops>=0.7.0 (from manim)
  Downloading skia_pathops-0.8.0.post1-cp310-cp310-manylinux_2_17_x86_64.manylinux201
                    ──────────────────────────── 3.3/3.3 MB 80.2 MB/s eta 0:00:00
Collecting srt>=3.0.0 (from manim)
  Downloading srt-3.5.3.tar.gz (28 kB)
```