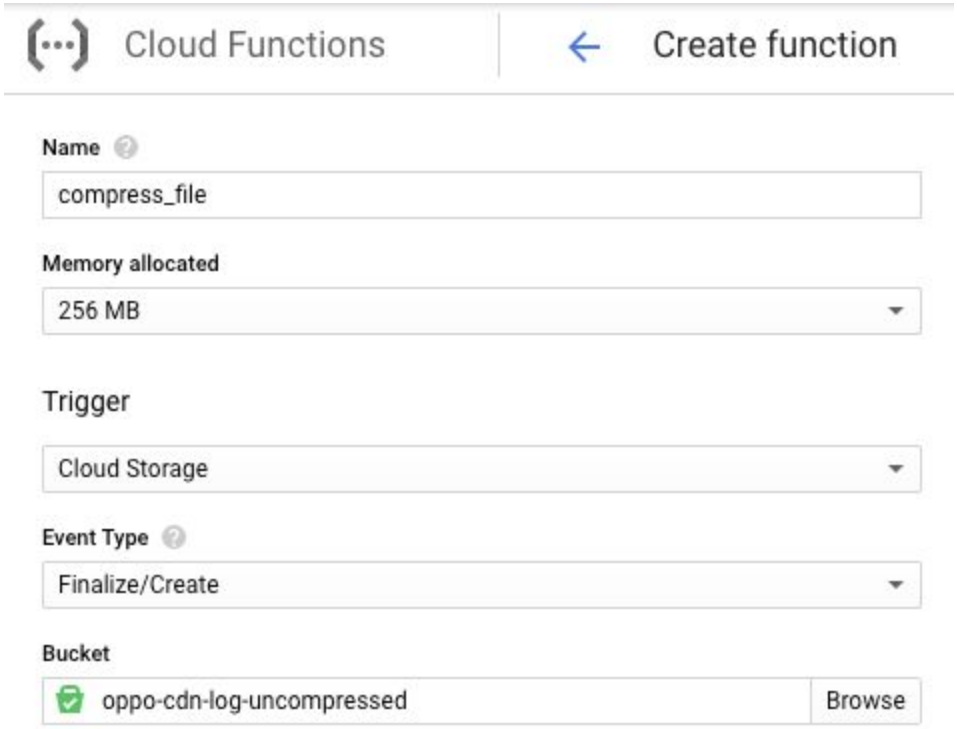
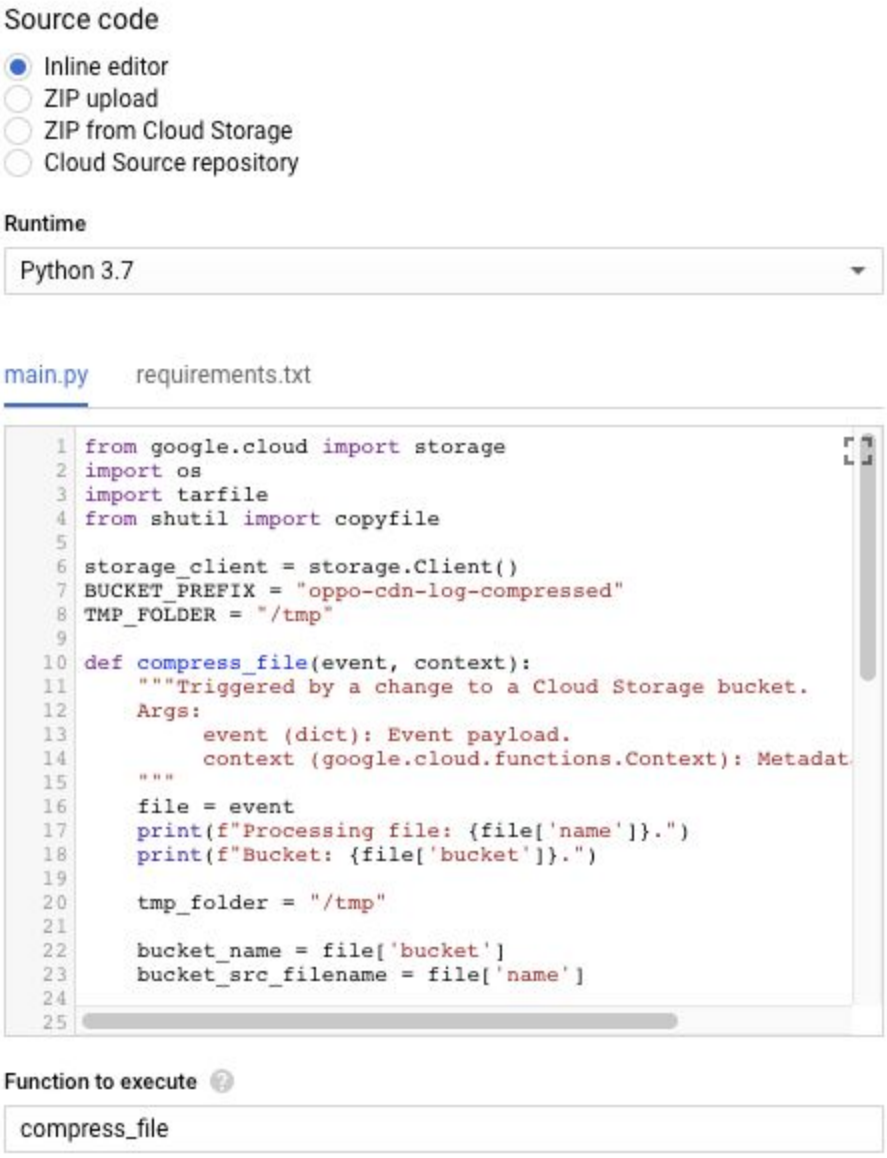
# 用Cloud Functions压缩GCS中的日志文件

在Cloud Functions控制台界面，创建新的Function。




- Trigger选择Cloud Storage
- Event Type选择Finalize/Create
- Bucket选择未压缩日志文件所存放的存储桶

按如下内容填写Function的代码。



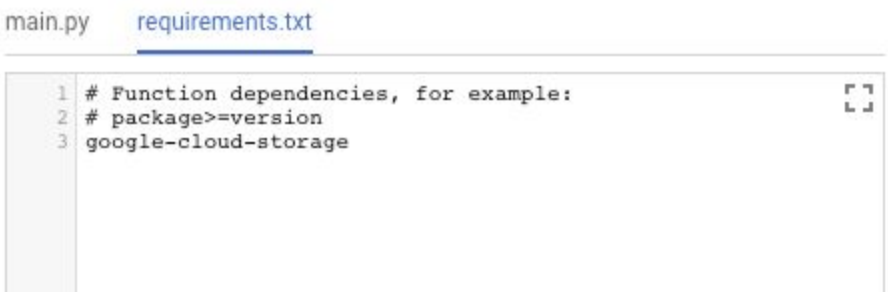

其中，main.py的内容为如下代码。注意将BUCKET_PREFIX的值改为你创建的压缩日志存放桶的名称。

```
from google.cloud import storage
import os
import tarfile
from shutil import copyfile

storage_client = storage.Client()
BUCKET_PREFIX = "cdn-log-compressed"
TMP_FOLDER = "/tmp"
```

```python
def compress_file(event, context):
    """Triggered by a change to a Cloud Storage bucket.
    Args:
         event (dict): Event payload.
         context (google.cloud.functions.Context): Metadata for the event.
    """
    file = event
    print(f"Processing file: {file['name']}.")
    print(f"Bucket: {file['bucket']}.")

    tmp_folder = "/tmp"

    bucket_name = file['bucket']
    bucket_src_filename = file['name']


    if (bucket_src_filename.startswith(BUCKET_PREFIX)):
      return

    filename_w_ext = os.path.basename(bucket_src_filename)
    filename, file_extension = os.path.splitext(filename_w_ext)
    local_src_file_name = TMP_FOLDER + "/" + filename_w_ext

    local_dest_file_name = TMP_FOLDER + "/" + filename + ".tar.gz"
    bucket_dest_filename = BUCKET_PREFIX + "/" + filename + ".tar.gz"

    bucket = storage_client.get_bucket(bucket_name)
    blob = bucket.blob(bucket_src_filename)
    blob.download_to_filename(local_src_file_name)

    #copyfile(local_src_file_name, local_dest_file_name)
    make_tarfile(local_dest_file_name, local_src_file_name)

    blob = bucket.blob(bucket_dest_filename)
    blob.upload_from_filename(local_dest_file_name)

    os.remove(local_src_file_name)
    os.remove(local_dest_file_name)

def make_tarfile(output_filename, source_dir):
    with tarfile.open(output_filename, "w:gz") as tar:
```

```
        tar.add(source_dir, arcname=os.path.basename(source_dir))
```

在requirements.txt中加上google-cloud-storage。




点击代码框下方的“more”，在Advanced options中选择合适的区域。


点击创建。