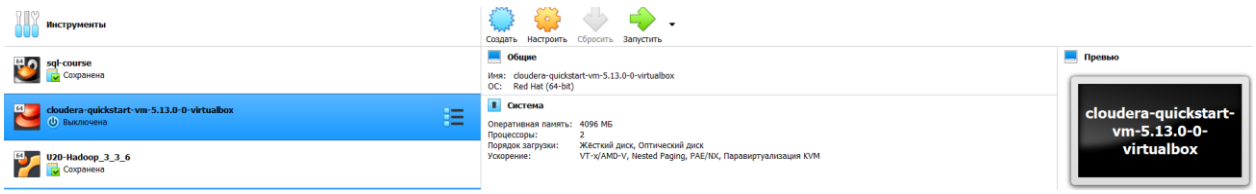
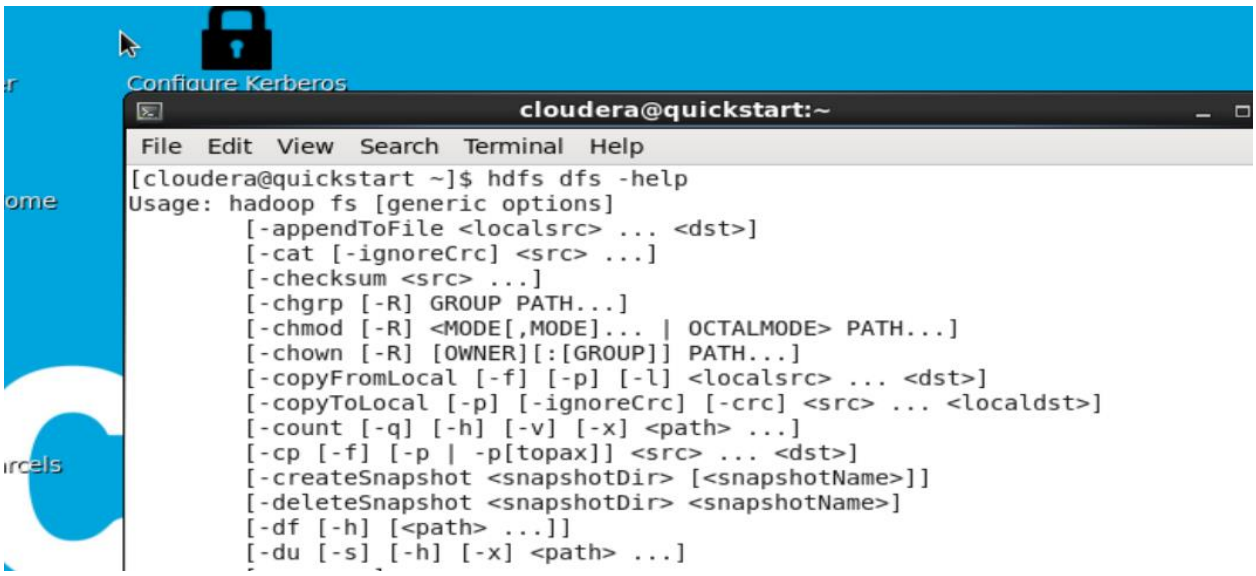
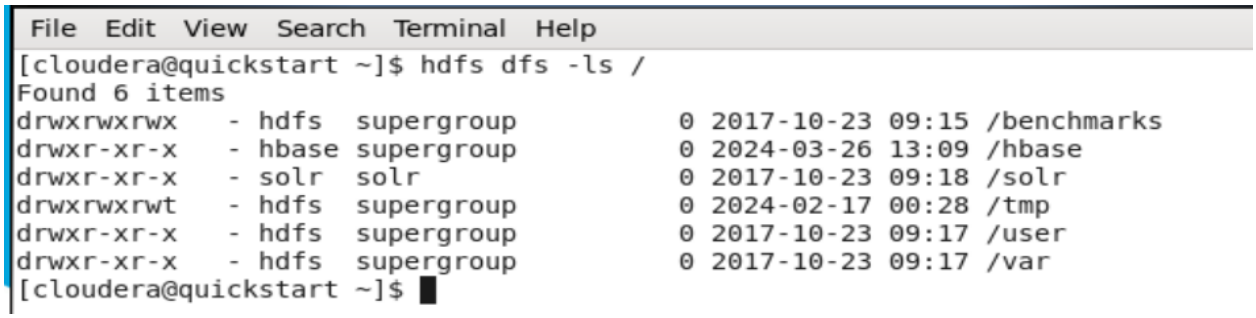
3.1.1. Развернуть виртуальное окружение.+



3.1.2. Вывести с помощью команды help описание основных команды shell-клиента.



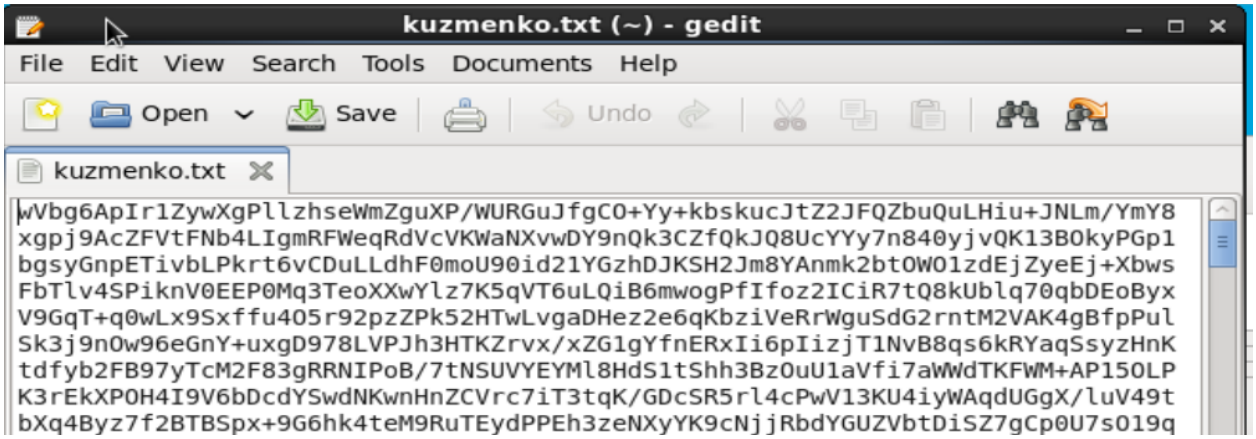
3.1.3. Просмотреть корневую директорию HDFS.



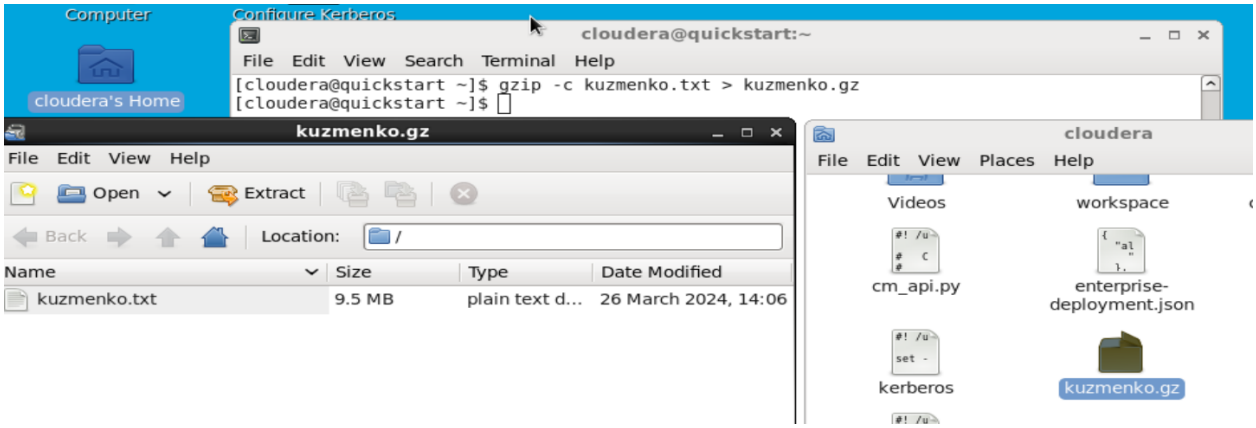
3.1.4. Создать в HDFS в директории /user/mgpu поддиректорию ваше_фио.

3.1.5. Создать в локальной файловой системе случайный текстовый файл размером 10 Mb с именем, образованным вашими инициалами base64 /dev/urandom | head -c 10000000 > file.txt .

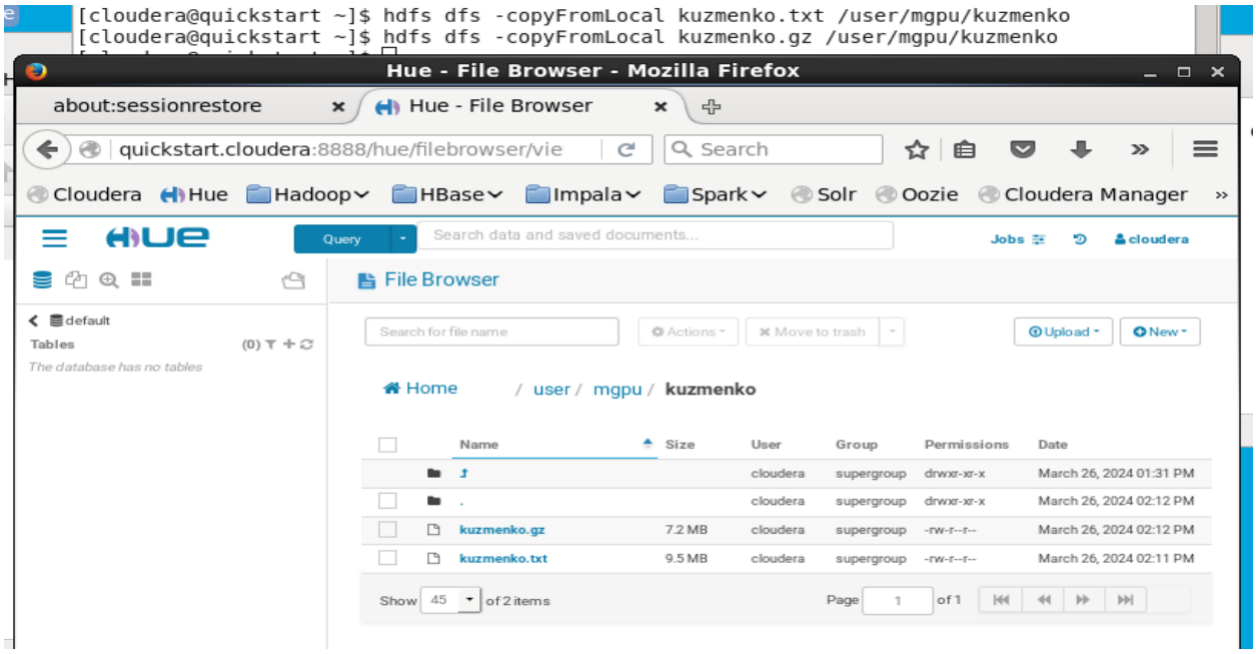
```
[cloudera@quickstart ~]$ base64 /dev/urandom | head -c 10000000 > kuzmenko.txt
```



3.1.6. Заархивировать созданный текстовый файл gzip -c file.txt > file.gz .



3.1.7. Скопировать текстовый файл и архив в директорию /user/mgpu/fio HDFS виртуальной машины.



3.1.8. Просмотреть файл и архив с помощью утилит `cat`, `text` в комбинации с каналами и утилитами `head`, `tail` -- привести не менее 3 вариантов команд и просмотра файла.

```
[cloudera@quickstart ~]$ cat kuzmenko.txt
```

```
cloudera@quickstart:~
File  Edit  View  Search  Terminal  Help
YZ3YIvcFDfVchP/Oh574MCP/7c7Jil5ymyROQiT54Ec3JZPQMAdfBXB2T46O7UjOi2zot/vgcHdY
tlh+GG1+Qr2+Wc6b8RFes22MvhznphBgNo7yTSPPYXemYI2ypdkJvyin6lLQY4eERCViBa+bWjUX
l/jPx/ooqJmoHltrcG3w+7ztrFlZOmu03ThNAdYMhf/HqMmi+pW/r34AXJ2bYb7CBFn80XmXMJUr
V5wVwlgd8KEDpTBZn8Y4ZbBZ6/MT6mUdw9EaUm/UOJkVqF+HHar/GfaXNnuYhLOwxNeil0qI7jJo
thEkMdfEtmxysarFV0rkswHngGXCFr5iOdB/odufl+7xTmkUxbew/Lp9Lu2V8LtJMkstqgy/QaUl
1Y6n52GLqFD/RSad7QIFOtbt3oyiAGIgxOYYSLB+L3HcQiF11z4JxRmMexKFTVGYALRZOzO2j7Zc
QLDTTAiTNpOlyZQIKEYpLZ8NHZCqXA2+LghUPHaHExGOFRLVH6BM5BS4BxFn8NK7Veddk5jbPf8l
SgdSG0baP/iAKEO0PlX5lDP+TBTQtIRmHI85q+y1bwLKuTVIfLDUhmwyq8t5mLwTjIzsUSYCZFk8
dtOu87TNkRj9BJii3YBiKvasNKvGC0zRIzaOJQTLarrwjUd9GAvvS97qLQ3Av+0AujZ3vA3ZOmsl
P/vYPGqxJXRdrkeCPv4I/amFtSCAMA6rnGEBmuLTbkN7D5GesMuNE3LGAfB6XOn61EEZoeNp0MlU
cxCss/s6pCW90HaB7IDALo/PLLit2FCoTjA3nzIkY7BtkDfbR0GmOmEwL270fRAYF6rSPU/v0Z/0
WgO9P7H4/lCbk6Lk49WPSf60TcC5YhzCHCkFDnLhyX5alWc8mDHDe7LJk+r7vDXgUyHALJt3SSOc
6l+EacWn/uionN4+nCB5b7MF0unGEU1Uj7TGKV4UieY97VqjTM8RIdu0ASDZTg1Ik4Z+fPDaX9Q/
issVAsdTI5+O6ctvgbPQ56sk1BEQCAj3vjVJWwYbW07+NamhKncdr4PiOiACGKjKt1Sju4XYiD/S
lwqbC61WlTct1UZBqCyguo99nptfXN5zXmwAeuEMsKBK3je/QIPUqZIxIY7YKLblpN/roo0oVQwY
aSxSzCjsndiqCgiee61E1L+ZzTFB54DjxZYvyE3jWJiFszCvz8GuO6F/z/VeBiFvu56J2649UYOj
fa9Ucdj9uldwaHUAPees8IYnL+SzIw6zn2qiPEFE9pLuhsnbGs6A3/ATwJTnw9FKtaC9gqi19rXT
yAqEQf5OWJyKtl6o88gGgCR923+muludRRVCZCiCUgAsy4OjpPMdBXNPg5SyY3v6E2eiH4pO+fnv
boaemrOUXXdHYaucl+byqjXQerpS5h0DnOZUx6r2sy3u56YobFfM/CY8XRZwd/orPiuUH3S1EFLK
iM5jfel8oo0We3dVrp8fplsRVDEQjJvDt9q0igUa9/keF/EXSfKvKTH94NQRed9rMEtTIyFA/Jaa
CwSE46YfrjfJeKprQpoNxQS/Mzym6whEDxlFhmbEuGAMfnwKf0o7bZq3p/m9T9WuU8mE5I/PyuXG
E5VJZb0CNXCCD4mp+if0xqxtgEEk3mj/RK4lzQ7cOuHaf5PcTdr5FifpxpOhO+wuCNSJmuLvPf3z
m8iCNXRyjTlw3VbeeFeUqTWK7f21nwyAjG1lWqjKv/GiC+9nNkdEcsjyiM8rfWFr7VP8dG8cd/85
88D9blo+QA[cloudera@quickstart ~]$
```

```
[cloudera@quickstart ~]$ cat -n kuzmenko.txt
```

```
SSOc
129860  6l+EacWn/uionN4+nCB5b7MF0unGEU1Uj7TGKV4UieY97VqjTM8RIdu0ASDZTg1Ik4Z+fPDa
X9Q/
129861  issVAsdTI5+O6ctvgbPQ56sk1BEQCAj3vjVJWwYbW07+NamhKncdr4PiOiACGKjKt1Sju4XY
iD/S
129862  lwqbC61WlTct1UZBqCyguo99nptfXN5zXmwAeuEMsKBK3je/QIPUqZIxIY7YKLblpN/roo0o
VQwY
129863  aSxSzCjsndiqCgiee61E1L+ZzTFB54DjxZYvyE3jWJiFszCvz8GuO6F/z/VeBiFvu56J2649
UYOj
129864  fa9Ucdj9uldwaHUAPees8IYnL+SzIw6zn2qiPEFE9pLuhsnbGs6A3/ATwJTnw9FKtaC9gqi1
9rXT
129865  yAqEQf5OWJyKtl6o88gGgCR923+muludRRVCZCiCUgAsy4OjpPMdBXNPg5SyY3v6E2eiH4pO
+fnv
129866  boaemrOUXXdHYaucl+byqjXQerpS5h0DnOZUx6r2sy3u56YobFfM/CY8XRZwd/orPiuUH3S1
EFLK
129867  iM5jfel8oo0We3dVrp8fplsRVDEQjJvDt9q0igUa9/keF/EXSfKvKTH94NQRed9rMEtTIyFA
/Jaa
129868  CwSE46YfrjfJeKprQpoNxQS/Mzym6whEDxlFhmbEuGAMfnwKf0o7bZq3p/m9T9WuU8mE5I/P
yuXG
129869  E5VJZb0CNXCCD4mp+if0xqxtgEEk3mj/RK4lzQ7cOuHaf5PcTdr5FifpxpOhO+wuCNSJmuLv
Pf3z
129870  m8iCNXRyjTlw3VbeeFeUqTWK7f21nwyAjG1lWqjKv/GiC+9nNkdEcsjyiM8rfWFr7VP8dG8c
d/85
```

```
[cloudera@quickstart ~]$ cat -b kuzmenko.txt
```

```
SSOc
129860  6l+EacWn/uionN4+nCB5b7MF0unGEU1Uj7TGKV4UieY97VqjTM8RIdu0ASDZTg1Ik4
X9Q/
129861  issVAsdTI5+O6ctvgbPQ56sk1BEQCAj3vjVJWwYbW07+NamhKncdr4PiOiACGKjKt1
iD/S
129862  lwqbC61WlTct1UZBqCyguo99nptfXN5zXmwAeuEMsKBK3je/QIPUqZIxIY7YKLblpN
VQwY
129863  aSxSzCjsndiqCgiee61E1L+ZzTFB54DjxZYvyE3jWJiFszCvz8GuO6F/z/VeBiFvu5
UYOj
129864  fa9Ucdj9uldwaHUAPees8IYnL+SzIw6zn2qiPEFE9pLuhsnbGs6A3/ATwJTnw9FKta
9rXT
129865  yAqEQf5OWJyKtl6o88gGgCR923+muludRRVCZCiCUgAsy4OjpPMdBXNPg5SyY3v6E2
+fnv
129866  boaemrOUXXdHYaucl+byqjXQerpS5h0DnOZUx6r2sy3u56YobFfM/CY8XRZwd/orPi
EFLK
129867  iM5jfel8oo0We3dVrp8fplsRVDEQjJvDt9q0igUa9/keF/EXSfKvKTH94NQRed9rME
/Jaa
129868  CwSE46YfrjfJeKprQpoNxQS/Mzym6whEDxlFhmbEuGAMfnwKf0o7bZq3p/m9T9WuU8
yuXG
129869  E5VJZb0CNXCCD4mp+if0xqxtgEEk3mj/RK4lzQ7cOuHaf5PcTdr5FifpxpOhO+wuCM
Pf3z
129870  m8iCNXRyjTlw3VbeeFeUqTWK7f21nwyAjG1lWqjKv/GiC+9nNkdEcsjyiM8rfWFr7V
d/85
```

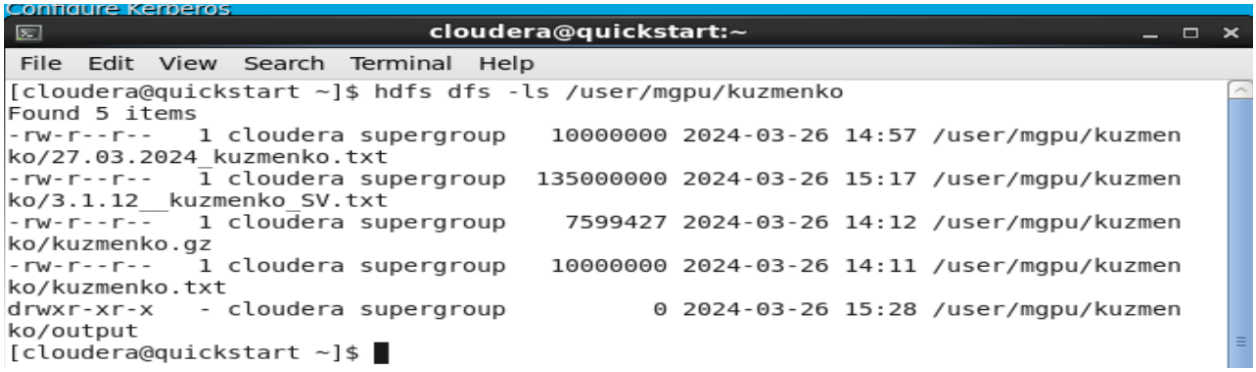
```
[cloudera@quickstart ~]$ head  kuzmenko.txt
wVbg6ApIr1ZywXgPllzhseWmZguXP/WURGuJfgCO+Yy+kbskucJtZ2JFQZbuQuLHiu+JNLm/YmY8
xgpj9AcZFVtFNb4LIgmRFWeqRdVcVKWaNXvwDY9nQk3CZfQkJQ8UcYYy7n840yjvQK13BOkyPGp1
bgsyGnpETivbLPkrt6vCDuLLdhF0moU90id21YGzhDJKSH2Jm8YAnmk2btOWO1zdEjZyeEj+Xbws
FbTlv4SPiknV0EEP0Mq3TeoXXwYlz7K5qVT6uLQiB6mwogPfIfoz2ICiR7tQ8kUblq70qbDEoByx
V9GqT+q0wLx9Sxffu4O5r92pzZPk52HTwLvgaDHez2e6qKbziVeRrWguSdG2rntM2VAK4gBfpPul
Sk3j9nOw96eGnY+uxgD978LVPJh3HTKZrvx/xZG1gYfnERxIi6pIizjT1NvB8qs6kRYaqSsyzHnK
tdfyb2FB97yTcM2F83gRRNIPoB/7tNSUVYEYMl8HdS1tShh3BzOuU1aVfi7aWWdTKFWM+AP15OLP
K3rEkXPOH4I9V6bDcdYSwdNKwnHnZCVrc7iT3tqK/GDcSR5rl4cPwV13KU4iyWAqdUGgX/luV49t
bXq4Byz7f2BTBSpx+9G6hk4teM9RuTEydPPEh3zeNXyYK9cNjjRbdYGUZVbtDiSZ7gCp0U7sO19q
4468Id+JC30mrZgoxeRJKhYJe7lfR+AmrnVdS8J3zihRxtpQ9+HcrpnGotd67U4qK9tkuqdjV/va
[cloudera@quickstart ~]$ head -c 7 kuzmenko.txt
wVbg6Ap[cloudera@quickstart ~]$ head -n 7 kuzmenko.txt
wVbg6ApIr1ZywXgPllzhseWmZguXP/WURGuJfgCO+Yy+kbskucJtZ2JFQZbuQuLHiu+JNLm/YmY8
xgpj9AcZFVtFNb4LIgmRFWeqRdVcVKWaNXvwDY9nQk3CZfQkJQ8UcYYy7n840yjvQK13BOkyPGp1
bgsyGnpETivbLPkrt6vCDuLLdhF0moU90id21YGzhDJKSH2Jm8YAnmk2btOWO1zdEjZyeEj+Xbws
FbTlv4SPiknV0EEP0Mq3TeoXXwYlz7K5qVT6uLQiB6mwogPfIfoz2ICiR7tQ8kUblq70qbDEoByx
V9GqT+q0wLx9Sxffu4O5r92pzZPk52HTwLvgaDHez2e6qKbziVeRrWguSdG2rntM2VAK4gBfpPul
Sk3j9nOw96eGnY+uxgD978LVPJh3HTKZrvx/xZG1gYfnERxIi6pIizjT1NvB8qs6kRYaqSsyzHnK
tdfyb2FB97yTcM2F83gRRNIPoB/7tNSUVYEYMl8HdS1tShh3BzOuU1aVfi7aWWdTKFWM+AP15OLP
[cloudera@quickstart ~]$
```

```
[cloudera@quickstart ~]$ tail kuzmenko.txt
lwqbC61WlTct1UZBqCyguo99nptfXN5zXmwAeuEMsKBK3je/QIPUqZIxIY7YKLblpN/roo0oVQwY
aSxSzCjsndiqCgiee61E1L+ZzTFB54DjxZYvyE3jWJiFszCvz8GuO6F/z/VeBiFvu56J2649UYOj
fa9Ucdj9uldwaHUAPees8IYnL+SzIw6zn2qiPEFE9pLuhsnbGs6A3/ATwJTnw9FKtaC9gqi19rXT
yAqEQf5OWJyKtl6o88gGgCR923+muludRRVCZCiCUgAsy4OjpPMdBXNPg5SyY3v6E2eiH4pO+fnv
boaemrOUXXdHYaucl+byqjXQerpS5h0DnOZUx6r2sy3u56YobFfM/CY8XRZwd/orPiuUH3S1EFLK
iM5jfel8oo0We3dVrp8fplsRVDEQjJvDt9q0igUa9/keF/EXSfKvKTH94NQRed9rMEtTIyFA/Jaa
CwSE46YfrjfJeKprQpoNxQS/Mzym6whEDxlFhmbEuGAMfnwKf0o7bZq3p/m9T9WuU8mE5I/PyuXG
E5VJZb0CNXCCD4mp+if0xqxtgEEk3mj/RK4lzQ7cOuHaf5PcTdr5FifpxpOhO+wuCNSJmuLvPf3z
m8iCNXRyjTlw3VbeeFeUqTWK7f21nwyAjG1lWqjKv/GiC+9nNkdEcsjyiM8rfWFr7VP8dG8cd/85
88D9blo+QA[cloudera@quickstart ~]$
[cloudera@quickstart ~]$ tail -c 7 kuzmenko.txt
9blo+QA[cloudera@quickstart ~]$
[cloudera@quickstart ~]$ tail -n 7 kuzmenko.txt
yAqEQf5OWJyKtl6o88gGgCR923+muludRRVCZCiCUgAsy4OjpPMdBXNPg5SyY3v6E2eiH4pO+fnv
boaemrOUXXdHYaucl+byqjXQerpS5h0DnOZUx6r2sy3u56YobFfM/CY8XRZwd/orPiuUH3S1EFLK
iM5jfel8oo0We3dVrp8fplsRVDEQjJvDt9q0igUa9/keF/EXSfKvKTH94NQRed9rMEtTIyFA/Jaa
CwSE46YfrjfJeKprQpoNxQS/Mzym6whEDxlFhmbEuGAMfnwKf0o7bZq3p/m9T9WuU8mE5I/PyuXG
E5VJZb0CNXCCD4mp+if0xqxtgEEk3mj/RK4lzQ7cOuHaf5PcTdr5FifpxpOhO+wuCNSJmuLvPf3z
m8iCNXRyjTlw3VbeeFeUqTWK7f21nwyAjG1lWqjKv/GiC+9nNkdEcsjyiM8rfWFr7VP8dG8cd/85
88D9blo+QA[cloudera@quickstart ~]$
[cloudera@quickstart ~]$
```

3.1.9. Создать копию файла file.txt вида date_file.txt, где в начале имени файла-копии указана текущая дата. Вывести листинг.

```
[cloudera@quickstart ~]$ cp kuzmenko.txt 27.03.2024_kuzmenko.txt
[cloudera@quickstart ~]$ ls
27.03.2024_kuzmenko.txt  Desktop    eclipse                     kerberos      lib      Pictures   Videos
cloudera-manager         Documents  enterprise-deployment.json  kuzmenko.gz   Music    Public     workspace
cm_api.py                Downloads  express-deployment.json     kuzmenko.txt  parcels  Templates
[cloudera@quickstart ~]$ hdfs dfs -cat /user/mgpu/kuzmenko/kuzmenko.txt ^C
[cloudera@quickstart ~]$ hdfs dfs -cp /user/mgpu/kuzmenko/kuzmenko.txt /user/mgpu/kuzmenko/27.03.2024_kuzmenko.txt
[cloudera@quickstart ~]$ hdfs dfs -ls /user/mgpu/kuzmenko/
Found 3 items
-rw-r--r--   1 cloudera supergroup   10000000 2024-03-26 14:57 /user/mgpu/kuzmenko/27.03.2024_kuzmenko.txt
-rw-r--r--   1 cloudera supergroup    7599427 2024-03-26 14:12 /user/mgpu/kuzmenko/kuzmenko.gz
-rw-r--r--   1 cloudera supergroup   10000000 2024-03-26 14:11 /user/mgpu/kuzmenko/kuzmenko.txt
[cloudera@quickstart ~]$
```

3.1.10. Вывести статистику по директории /user/mgpu/fio виртуальной машины.



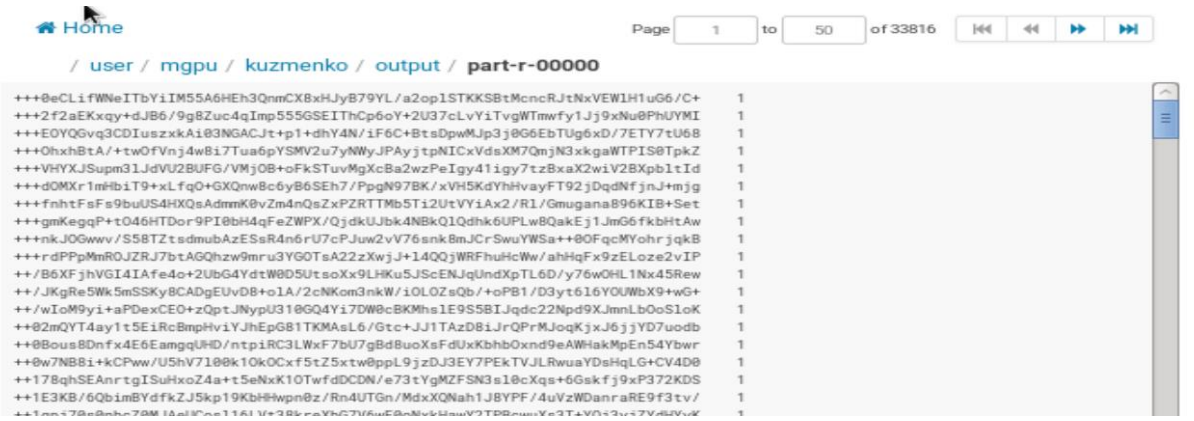
3.1.11. Удалить поддиректорию `/fio` со всем содержимым.

```
[cloudera@quickstart ~]$ hdfs dfs -rm -R /user/mgpu/kuzmenko
Deleted /user/mgpu/kuzmenko
[cloudera@quickstart ~]$
```

3.1.12. Подсчитать количество слов в файле внутри HDFS с помощью методологии Map Reduce (размер файла не менее 128 Мб).

```
[cloudera@quickstart ~]$ base64 /dev/urandom | head -c 135000000 > 3.1.12__kuzmenko_SV.txt
[cloudera@quickstart ~]$ hdfs dfs -copyFromLocal 3.1.12__kuzmenko_SV.txt /user/mgpu/kuzmenko
```

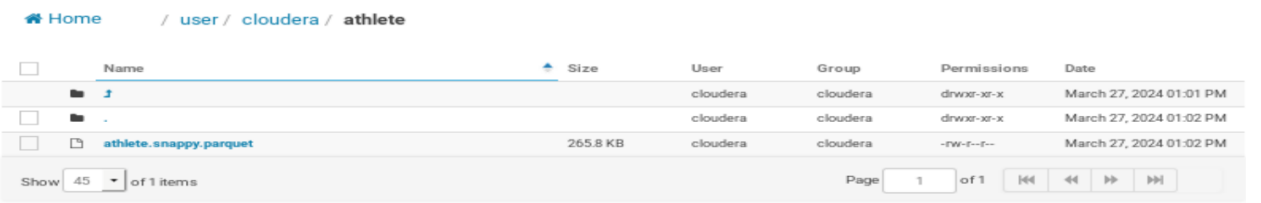
```
[cloudera@quickstart ~]$ yarn jar /usr/lib/hadoop-mapreduce/hadoop-mapreduce-examples.jar wordcount /user/mgpu/kuzmenko/3.12__kuzmenko_SV.txt /user/mgpu/kuzmenko/output
24/03/26 15:26:59 INFO client.RMProxy: Connecting to ResourceManager at /0.0.0.0:8032
24/03/26 15:27:03 INFO input.FileInputFormat: Total input paths to process : 1
24/03/26 15:27:04 INFO mapreduce.JobSubmitter: number of splits:1
24/03/26 15:27:05 INFO mapreduce.JobSubmitter: Submitting tokens for job: job_1711484710610_0001
24/03/26 15:27:07 INFO impl.YarnClientImpl: Submitted application application_1711484710610_0001
24/03/26 15:27:08 INFO mapreduce.Job: The url to track the job: http://quickstart.cloudera:8088/proxy/application_1711484710610_0001/
24/03/26 15:27:08 INFO mapreduce.Job: Running job: job_1711484710610_0001
24/03/26 15:27:44 INFO mapreduce.Job: Job job_1711484710610_0001 running in uber mode : false
24/03/26 15:27:44 INFO mapreduce.Job:  map 0% reduce 0%
24/03/26 15:28:10 INFO mapreduce.Job:  map 41% reduce 0%
24/03/26 15:28:16 INFO mapreduce.Job:  map 67% reduce 0%
24/03/26 15:28:23 INFO mapreduce.Job:  map 87% reduce 0%
24/03/26 15:28:25 INFO mapreduce.Job:  map 100% reduce 0%
24/03/26 15:28:40 INFO mapreduce.Job:  map 100% reduce 100%
24/03/26 15:28:40 INFO mapreduce.Job: Job job_1711484710610_0001 completed successfully
24/03/26 15:28:40 INFO mapreduce.Job: Counters: 49
        File System Counters
                FILE: Number of bytes read=291038990
                FILE: Number of bytes written=436845764
                FILE: Number of read operations=0
                FILE: Number of large read operations=0
                FILE: Number of write operations=0
                HDFS: Number of bytes read=135000139
                HDFS: Number of bytes written=138506495
                HDFS: Number of read operations=6
                HDFS: Number of large read operations=0
                HDFS: Number of write operations=2
        Job Counters
                Launched map tasks=1
                Launched reduce tasks=1
                Data-local map tasks=1
                Total time spent by all maps in occupied slots (ms)=37809
                Total time spent by all reduces in occupied slots (ms)=12389
                Total time spent by all map tasks (ms)=37809
                Total time spent by all reduce tasks (ms)=12389
                Total vcore-milliseconds taken by all map tasks=37809
```



3.2. Создание таблицы в Hive

1. Скачать датасет или тут

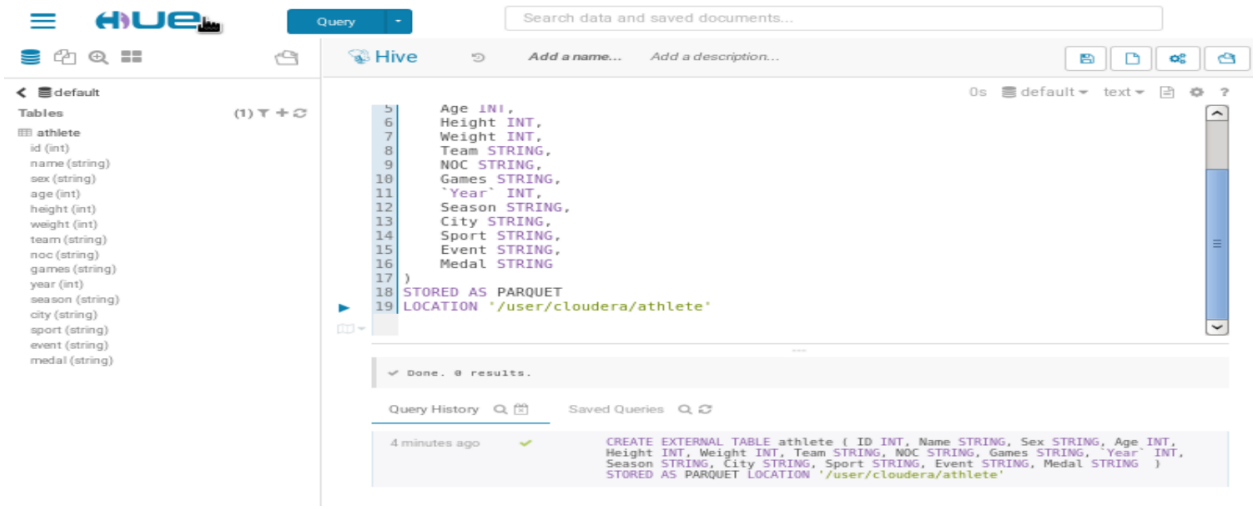
2. Через HUE загрузите файл в папку /user/cloudera/athlete.
3. В навигационном меню выберите Files.
4. Создайте папку.
5. Загрузите файл в HDFS, нажав Upload.



6. Перейдите в "Editor > Hive" и выполните запрос:

```
CREATE EXTERNAL TABLE athlete (
    ID INT,
    Name STRING,
    Sex STRING,
    Age INT,
    Height INT,
    Weight INT,
```

```
    Team STRING,
    NOC STRING,
    Games STRING,
    `Year` INT,
    Season STRING,
    City STRING,
    Sport STRING,
    Event STRING,
    Medal STRING
)
STORED AS PARQUET
LOCATION '/user/cloudera/athlete'
```



3.3 Проанализировать и визуализировать данные с помощью Impala(высокоскоростной механизм запросов SQL) или Hive.

Загрузить и разархивировать babs_open_data_year_1.zip.

```
[cloudera@quickstart ~]$ unzip babs_open_data_year_1.zip
Archive:  babs_open_data_year_1.zip
   creating: 201402_babs_open_data/
  inflating: 201402_babs_open_data/201402_station_data.csv
  inflating: 201402_babs_open_data/201402_status_data.csv
  inflating: 201402_babs_open_data/201402_trip_data.csv
  inflating: 201402_babs_open_data/201402_weather_data.csv
  inflating: 201402_babs_open_data/README.txt
   creating: 201408_babs_open_data/
  inflating: 201408_babs_open_data/201408_station_data.csv
  inflating: 201408_babs_open_data/201408_status_data.csv
  inflating: 201408_babs_open_data/201408_trip_data.csv
  inflating: 201408_babs_open_data/201408_weather_data.csv
  inflating: 201408_babs_open_data/README.txt
```

Перенести данные 201402_trip_data.csv в HDFS.

Home / user / cloudera / **trip_data**

	Name	Size	User	Group	Permissions	Date
	↑		cloudera	cloudera	drwxr-xr-x	March 28, 2024 12:38 PM
	.		cloudera	cloudera	drwxr-xr-x	March 28, 2024 12:38 PM
	201402_trip_data.csv	16.4 MB	cloudera	cloudera	-rw-r--r--	March 28, 2024 11:51 AM

Show 45 of 1 items Page 1 of 1

Создать таблицу в Hive с привязкой к внешним данным 201402_trip_data.csv.

0s default text

```
drop table if exists 201402_trip_data;
CREATE EXTERNAL TABLE 201402_trip_data (
TripID INT,
Duration INT,
StartDate STRING,
startstation STRING,
StartTerminal INT,
EndDate STRING,
endstation STRING,
EndTerminal INT,
Bike INT,
SubscriptionType STRING,
ZipCode STRING
)
ROW FORMAT DELIMITED
FIELDS TERMINATED BY ','
LOCATION '/user/cloudera/trip_data'
```

2/2

Success.

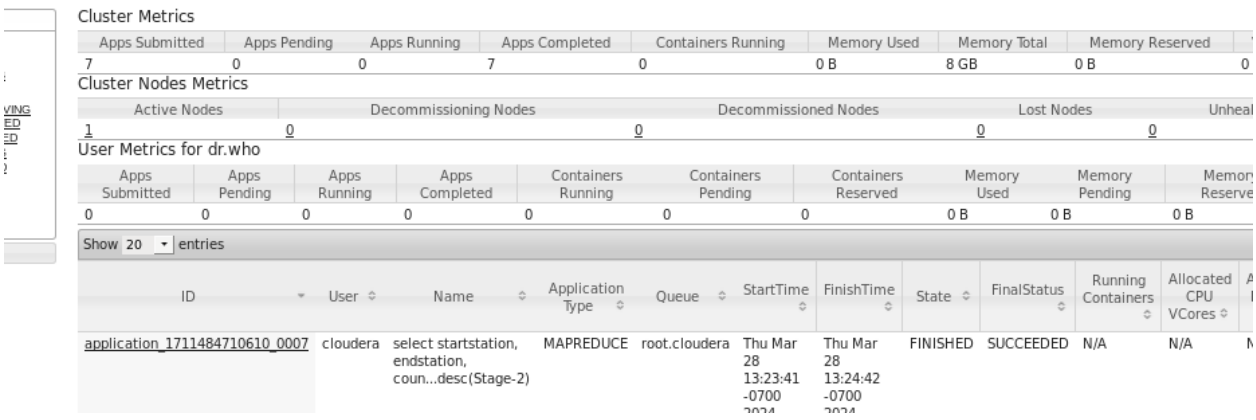
выполнить запрос

select `startstation`, `endstation`, count(*) as trips

from `default`.`201402_trip_data`

group by `startstation`, `endstation`

order by trips desc;



Cluster Metrics

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Memory Used	Memory Total	Memory Reserved
7	0	0	7	0	0 B	8 GB	0 B

Cluster Nodes Metrics

Active Nodes	Decommissioning Nodes	Decommissioned Nodes	Lost Nodes	Unheal
1	0	0	0	0

User Metrics for dr.who

Apps Submitted	Apps Pending	Apps Running	Apps Completed	Containers Running	Containers Pending	Containers Reserved	Memory Used	Memory Pending	Memory Reserve
0	0	0	0	0	0	0	0 B	0 B	0 B

Show 20 entries

ID	User	Name	Application Type	Queue	StartTime	FinishTime	State	FinalStatus	Running Containers	Allocated CPU VCores
application_1711484710610_0007	cloudera	select startstation, endstation, coun...desc(Stage-2)	MAPREDUCE	root.cloudera	Thu Mar 28 13:23:41 -0700 2024	Thu Mar 28 13:24:42 -0700 2024	FINISHED	SUCCEEDED	N/A	N/A

```
select startstation, endstation, count(*) as trips
from default.201402_trip_data
group by startstation, endstation
order by trips desc;
```

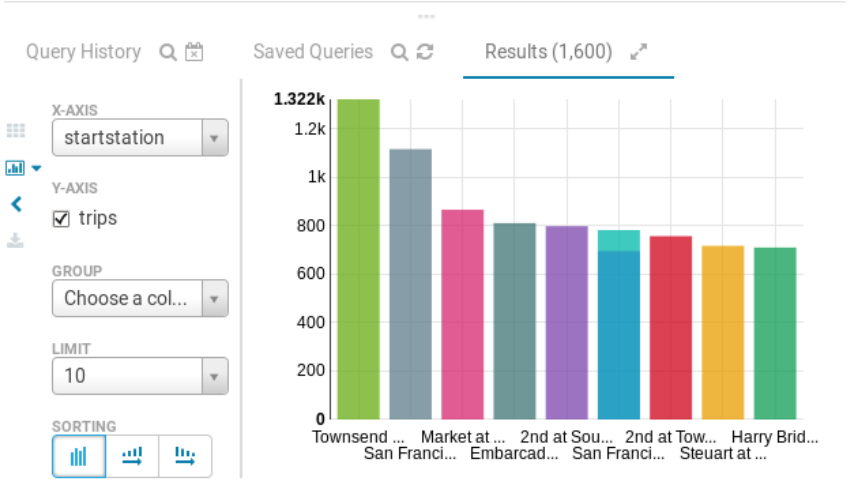
Query History | Saved Queries | Results (1,600)

	startstation	endstation	trips
1	Harry Bridges Plaza (Ferry Building)	Embarcadero at Sansome	1330
2	Townsend at 7th	San Francisco Caltrain (Townsend at 4th)	1322
3	San Francisco Caltrain 2 (330 Townsend)	Townsend at 7th	1116
4	Market at Sansome	2nd at South Park	866
5	Embarcadero at Sansome	Steuart at Market	811
6	2nd at South Park	Market at Sansome	798

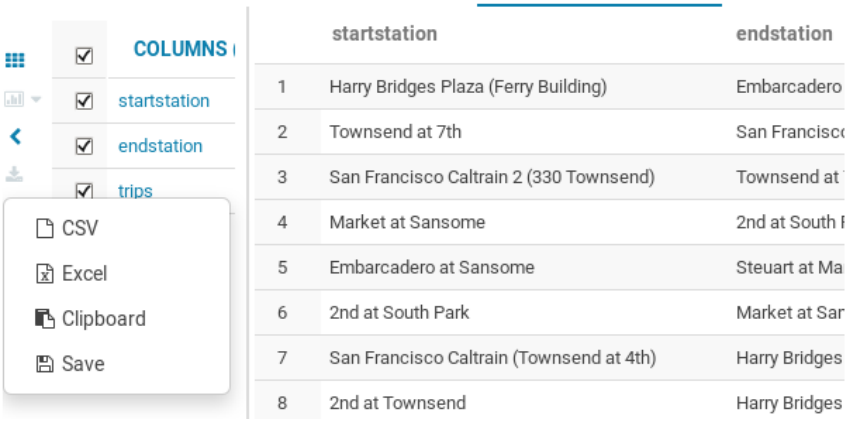
Создать гистограмму, щелкнув значок «Hue Bar»:

Установить ось X в качестве начальной станции, а ось Y — в качестве маршрута. Установить лимит 10.

```
select startstation, endstation, count(*) as trips
from default.201402_trip_data
group by startstation, endstation
order by trips desc;
```



Выгрузить результаты, выбрав CSV или Excel.



	startstation	endstation
1	Harry Bridges Plaza (Ferry Building)	Embarcadero
2	Townsend at 7th	San Francisc
3	San Francisco Caltrain 2 (330 Townsend)	Townsend at
4	Market at Sansome	2nd at South
5	Embarcadero at Sansome	Steuart at Ma
6	2nd at South Park	Market at Sar
7	San Francisco Caltrain (Townsend at 4th)	Harry Bridges
8	2nd at Townsend	Harry Bridges


query-hive-26.xlsx