

Boomi_Tweet_Prediction

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Instructions

This is a summary output of the code in R Markdown which was also submitted To Run the included RMD File, R studio is required. Rstudio Cloud is not recommended (it's slow) the desktop version is much faster. I could replicate this in python but I have much more experience in R, and my python skills are still a little amateur (working hard to remedy). To load the data, place the raw csv file in your working directory and run all code chunks and optionally knit to pdf (this will replicate this document)

Summary:

I have extensive training in several aspects of NLP including prediction which really came in handy with this. I was suspicious of over-fitting but after comparing results from training & testing, then shuffling the data and re-sampling, I'm still getting pretty much the same results. I'm confident that my model will perform well on the non-labeled data.

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- Both Test and Training data results show a 99% accuracy, consistent outcomes are a good sign.
- Time to complete is under 60 seconds. (Installing packages may extend this time)
- Advanced pre processing (key to great outcome)
- LSA
- K-Fold Cross Validation
- Tokenize
- Clean and Truncate text
- TFIDF
- svmLinear (othere tested, this was the best)
- Large (30%) sample data used to validate results

Sources:

I have extensive training in NLP which i relied on heavily. I also used information from the following. Certain chunks of code I developed previously for a personal NLP project, this made development a little easier.

<https://dataaspirant.com/support-vector-machine-classifier-implementation-r-caret-package/> https://seantrott.github.io/binary_classification_R/ <https://stackoverflow.com/questions/4090169/elegant-way-to-check-for-missing-packages-and-install-them> <https://cran.r-project.org/web/packages/caret/caret.pdf>
<https://cran.r-project.org/web/packages/quanteda/quanteda.pdf>

Install and Load Packages if required

```
# Time the code execution
start.time <- Sys.time()

# if required, install and load each package
if (!require('tidyverse')) install.packages('tidyverse'); library('tidyverse')
if (!require('e1071')) install.packages('e1071'); library('e1071')
if (!require('caret')) install.packages('caret'); library('caret')
if (!require('quanteda')) install.packages('quanteda'); library('quanteda')
if (!require('irlba')) install.packages('irlba'); library('irlba')
if (!require('randomForest')) install.packages('randomForest'); library('randomForest')
if (!require('doSNOW')) install.packages('doSNOW'); library('doSNOW')
if (!require('kernlab')) install.packages('kernlab'); library('kernlab')
```

Load data from Working Directory

```
# after manually placing the data in your working directory, Load the CSV
bos_b_twts_raw <- read_csv("boston_bombing_tweets.csv") #if error, add data to WD
```

Turn label data into categorical values

```
# turn the binary responses into a categorical value (factor)
bos_b_twts_raw$label <- as.factor(bos_b_twts_raw$label)
```

Filter for labeled data, split into train/test data (70/30)

```
# Filter for labeled data only
bos_b_twts_filt <- bos_b_twts_raw %>% filter(label != "NA")

# set seed for a consistent output
set.seed(12345)

# split labeled data into testing and training (70/30)
bos_b_twts_record <- createDataPartition(bos_b_twts_filt$label, times = 1,
                                          p = 0.7, list = FALSE)
```

```

bos_b_twts_train <- bos_b_twts_filt[bos_b_twts_record,]
bos_b_twts_test  <- bos_b_twts_filt[-bos_b_twts_record,]

```

Tokenize, clean, stem, set text frequency requirements and prep LSA and SVD

Terms: dfm: Document Feature Matrix tfidf: Term frequency - inverse document frequency: This is a measure used to identify which words are important. lsa: latent Semantic ANalysis: svd:

```

# Use quanteda to preprocess the text into tokens
bos_b_twts_train_token2 <- tokens(bos_b_twts_train$text,
                                  what = "word",
                                  remove_numbers = TRUE,
                                  remove_punct = TRUE,
                                  remove_symbols = TRUE,
                                  split_hyphens = TRUE) %>%

tokens_tolower()

# Further clean the text by removing stop words and stemming words
# Only use words with a frequency of 1.5% across 2+ tweets
bos_b_twts_train_dfm<-bos_b_twts_train_token2 %>%
  tokens_remove(stopwords(source = "smart")) %>%
  tokens_wordstem() %>%
  dfm() %>%
  dfm_trim( min_termfreq = round(nrow(bos_b_twts_train)*.02, 0),
            min_docfreq = 2) %>%
  dfm_tfidf()

# Latent Semantic Analysis - for dimension reduction (very important step)
train_lsa <- irlba(t(bos_b_twts_train_dfm),
                  nv = ncol(bos_b_twts_train_dfm)-1, maxit = 300) # this creates
# a trunkated file aprox 50 x 300
train_svd <- data.frame(Label = bos_b_twts_train$label,
                        ReviewLength= nchar(bos_b_twts_train$text),
                        train_lsa$v)

```

Lets preview what we have created

```
train_svd
```

##	Label	ReviewLength	X1	X2	X3	X4
## 1	1	146	-3.765649e-02	-2.507110e-02	2.159484e-03	-1.179281e-03
## 2	1	102	-3.568436e-02	-3.162089e-02	-6.536951e-02	-4.789848e-03
## 3	1	154	-1.297031e-02	-7.927574e-03	9.917403e-03	-1.469288e-02
## 4	0	104	-1.454266e-02	2.644404e-02	-4.209206e-03	1.038199e-03
## 5	1	74	-2.576942e-02	-8.048393e-03	-1.004785e-02	3.215377e-02
## 6	1	60	-2.255234e-02	-1.220332e-02	1.320847e-02	-4.114474e-02
## 7	1	155	-2.093532e-02	-3.944513e-03	1.938014e-02	4.697814e-02
## 8	1	88	-3.051096e-02	-2.068197e-02	-4.652492e-02	-3.719436e-03

## 9	1	58	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 10	1	52	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 11	1	67	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 12	1	128	-6.326161e-02	-5.042713e-02	-5.638361e-02	-4.168189e-02
## 13	1	137	-2.315646e-02	-1.247045e-03	2.828344e-02	-1.524422e-02
## 14	1	133	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 15	1	112	-1.427885e-02	-4.435970e-03	2.439400e-02	1.680564e-02
## 16	0	44	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 17	1	113	-1.909624e-02	-9.684706e-03	1.008422e-02	3.198780e-02
## 18	1	82	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 19	1	115	-2.823703e-02	1.182102e-02	1.048957e-02	-1.485579e-03
## 20	0	100	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 21	0	158	-2.471706e-02	-1.016953e-02	5.438317e-03	2.686784e-02
## 22	1	86	-2.160845e-02	8.411898e-04	4.281314e-02	2.660628e-02
## 23	1	145	-1.629316e-02	3.331471e-04	1.986282e-02	1.483072e-02
## 24	1	152	-2.957009e-02	-4.294446e-03	3.245402e-02	1.379659e-02
## 25	0	108	-1.738854e-02	1.885059e-02	-3.761561e-04	-6.836365e-04
## 26	0	134	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 27	0	136	-4.328800e-02	9.430726e-02	-2.557976e-02	-2.985079e-02
## 28	0	139	-3.871627e-02	-2.621095e-02	-7.382004e-03	-4.023260e-02
## 29	0	103	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 30	1	136	-2.048274e-02	-6.575779e-03	3.132105e-02	-1.227465e-02
## 31	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 32	0	151	-1.171261e-02	6.604189e-04	5.671247e-03	7.522423e-04
## 33	0	96	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 34	0	72	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 35	1	125	-1.357071e-02	-5.673687e-03	1.281503e-02	4.789519e-03
## 36	1	136	-6.477315e-02	-5.161075e-02	-8.312834e-02	-1.910495e-02
## 37	0	80	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 38	1	157	-2.261018e-02	-1.216905e-02	4.561923e-02	-3.990457e-02
## 39	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 40	1	93	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 41	0	43	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 42	1	140	-8.585088e-03	5.235261e-04	9.174068e-03	-2.911575e-03
## 43	0	62	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 44	1	112	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 45	0	134	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 46	1	141	-3.535560e-02	-1.132459e-02	3.748998e-02	-6.321906e-02
## 47	1	85	-1.658780e-02	-5.807312e-03	2.849733e-02	-2.787432e-02
## 48	1	125	-1.983650e-02	-1.113893e-02	-2.007687e-02	-1.403161e-03
## 49	0	132	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 50	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 51	0	107	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03
## 52	1	155	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 53	1	116	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 54	1	135	-4.409715e-02	-2.619014e-02	1.646563e-02	-3.999119e-02
## 55	1	153	-6.484161e-02	-4.421626e-02	-1.487540e-02	-8.460491e-03
## 56	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 57	1	110	-3.212174e-03	-9.875377e-05	6.449398e-03	6.719155e-03
## 58	1	143	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 59	1	75	-1.211497e-02	-6.777164e-03	2.949015e-02	-3.446984e-02
## 60	0	124	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 61	1	57	-3.568436e-02	-3.162089e-02	-6.536951e-02	-4.789848e-03
## 62	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03

## 63	0	123	-8.774696e-03	6.639616e-03	9.497457e-03	1.228373e-02
## 64	1	43	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 65	0	74	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 66	1	102	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 67	0	97	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 68	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 69	1	112	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 70	0	136	-2.763893e-02	5.663542e-02	-1.053882e-02	6.324549e-03
## 71	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 72	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 73	1	80	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 74	1	107	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 75	1	60	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 76	0	61	-1.953340e-02	4.229204e-02	-1.114563e-02	-9.711272e-03
## 77	0	117	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 78	0	145	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 79	0	68	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 80	1	136	-2.476397e-02	-1.780818e-02	-4.971949e-02	-6.741819e-03
## 81	0	65	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 82	0	136	-1.821991e-02	2.778303e-02	7.238583e-04	6.663319e-03
## 83	1	123	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 84	1	45	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 85	0	91	-1.898019e-02	3.667814e-02	-5.729763e-03	8.895498e-03
## 86	0	126	-4.244149e-03	-1.888951e-03	4.623584e-03	2.568919e-03
## 87	1	124	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 88	1	117	-2.572402e-02	-1.158683e-02	3.136536e-02	-5.004291e-02
## 89	0	80	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 90	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 91	1	137	-1.642145e-02	-1.241683e-02	-2.325350e-02	7.061078e-04
## 92	0	140	-8.603244e-03	6.984373e-03	7.089512e-03	1.012320e-02
## 93	0	80	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 94	1	109	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 95	0	138	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 96	0	102	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 97	0	112	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 98	1	139	-4.247907e-02	-2.521325e-02	-9.387625e-04	2.156499e-02
## 99	1	122	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 100	0	113	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 101	1	38	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 102	0	136	-2.994472e-02	6.044620e-02	-1.326936e-02	-8.437703e-03
## 103	1	157	-2.107413e-02	-9.749707e-03	3.913411e-02	-2.472830e-02
## 104	1	141	-1.298791e-02	-3.808379e-03	1.147763e-02	-5.196429e-03
## 105	1	94	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 106	1	153	-1.879771e-02	-5.088213e-03	3.211747e-02	4.943021e-04
## 107	1	138	-1.492054e-02	-5.034311e-03	2.083362e-02	-1.346225e-02
## 108	0	113	-2.868499e-02	6.165295e-02	-1.599495e-02	-1.207711e-02
## 109	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 110	0	115	-2.780669e-02	-1.454305e-02	3.013340e-03	-1.107704e-02
## 111	1	67	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 112	1	154	-4.996252e-02	-2.781242e-02	3.204797e-02	-5.649510e-02
## 113	0	95	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03
## 114	0	29	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 115	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 116	0	76	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04

## 117	1	107	-3.299944e-02	-2.173031e-02	-4.327463e-03	3.280470e-02
## 118	1	154	-4.456637e-02	-3.103203e-02	-1.375538e-03	1.704865e-02
## 119	1	111	-2.185736e-02	-7.655271e-04	1.218198e-02	3.692817e-02
## 120	1	148	-2.690704e-02	-1.416672e-02	2.811488e-02	-3.902268e-02
## 121	0	140	-9.777374e-03	1.656461e-02	-1.946596e-03	1.610658e-03
## 122	0	83	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 123	1	53	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 124	0	50	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 125	1	105	-1.445030e-02	-4.780727e-03	2.680194e-02	1.896617e-02
## 126	1	138	-1.175184e-02	-4.309141e-03	2.665637e-02	3.289001e-03
## 127	0	140	-9.414961e-03	-1.078609e-03	1.314467e-02	-4.910167e-03
## 128	0	95	-1.900850e-02	1.740301e-02	-4.450389e-04	-2.468323e-03
## 129	0	44	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 130	0	122	-5.375055e-02	1.132140e-01	-2.663733e-02	-1.892654e-02
## 131	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 132	1	132	-1.006933e-02	-4.585172e-04	2.634948e-02	1.006035e-02
## 133	0	106	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 134	0	131	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 135	0	135	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 136	0	122	-3.592493e-02	5.867034e-02	-1.529024e-02	4.206552e-03
## 137	0	116	-1.686307e-02	-5.452854e-04	2.488968e-02	1.376326e-02
## 138	1	143	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 139	1	55	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 140	1	114	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 141	1	130	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 142	1	73	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 143	0	59	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 144	1	23	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 145	1	153	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 146	1	115	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 147	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 148	1	87	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 149	0	84	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 150	1	89	-1.509696e-02	4.409669e-03	2.572267e-02	2.231890e-02
## 151	0	101	-8.911789e-03	-7.613785e-04	-1.848694e-03	1.858504e-03
## 152	0	73	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 153	0	101	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 154	1	148	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 155	1	82	-1.305214e-02	1.308587e-03	2.758782e-02	8.925285e-03
## 156	1	153	-2.671872e-02	-1.470727e-02	4.700918e-02	-4.972960e-02
## 157	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 158	1	47	-1.006933e-02	-4.585172e-04	2.634948e-02	1.006035e-02
## 159	0	140	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 160	0	93	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 161	0	53	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 162	0	64	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 163	1	113	-1.796913e-02	-8.833491e-03	1.011284e-02	3.397759e-02
## 164	1	158	-3.262049e-02	-2.284697e-02	-1.299715e-03	-1.085360e-02
## 165	1	129	-1.151467e-02	2.049225e-04	2.243778e-02	1.264818e-02
## 166	1	133	-2.815590e-02	-1.587183e-02	6.570243e-03	-2.982489e-02
## 167	1	69	-9.563837e-03	-3.352379e-03	1.937362e-02	9.633017e-03
## 168	1	151	-6.092620e-02	-4.245700e-02	-5.770147e-02	-1.531178e-02
## 169	1	140	-1.786196e-02	-9.650953e-03	3.268471e-02	-3.144746e-02
## 170	0	85	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03

## 171	0	64	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 172	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 173	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 174	1	41	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 175	1	55	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 176	1	144	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 177	0	136	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 178	1	100	-1.586719e-02	-4.796840e-03	3.327404e-02	7.925271e-03
## 179	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 180	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 181	0	131	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 182	0	127	-3.191468e-02	5.910802e-02	-9.475632e-03	8.460337e-04
## 183	1	148	-1.642145e-02	-1.241683e-02	-2.325350e-02	7.061078e-04
## 184	1	137	-3.137366e-02	-9.663599e-03	5.745290e-02	-1.500711e-02
## 185	0	63	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 186	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 187	1	139	-2.736476e-02	-2.041474e-02	3.014527e-03	-1.762489e-02
## 188	1	157	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 189	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 190	0	118	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 191	0	122	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 192	0	57	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 193	1	155	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 194	0	92	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 195	1	112	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 196	0	58	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 197	1	78	-1.697178e-02	-4.954792e-03	1.851771e-02	3.395146e-02
## 198	1	151	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 199	0	133	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 200	1	105	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 201	1	140	-1.175184e-02	-4.309141e-03	2.665637e-02	3.289001e-03
## 202	0	122	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 203	1	111	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 204	1	124	-2.600528e-02	6.454880e-03	-2.616453e-02	-2.633933e-03
## 205	1	128	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 206	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 207	1	130	-7.558072e-03	7.801664e-04	1.118295e-02	8.495544e-03
## 208	1	93	-2.329555e-02	-1.614183e-02	-2.008756e-02	1.738696e-03
## 209	1	155	-1.737184e-02	-9.834546e-03	2.679491e-02	-3.007409e-02
## 210	0	71	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 211	1	73	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 212	1	134	-2.121054e-02	-1.140815e-02	1.405866e-02	-1.808442e-02
## 213	1	134	-3.494399e-02	-2.306530e-02	2.554152e-02	-6.290478e-02
## 214	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 215	1	137	-4.796334e-02	-2.252250e-02	-6.815205e-03	2.374813e-02
## 216	0	78	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 217	0	133	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 218	1	119	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 219	1	59	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 220	0	106	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 221	0	99	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 222	1	134	-2.725245e-02	-1.885652e-02	-7.522025e-03	2.978231e-02
## 223	1	153	-2.820940e-02	-1.502255e-02	7.923691e-03	5.593574e-02
## 224	1	111	-2.555203e-02	-1.652228e-02	2.304152e-03	1.496848e-02

## 225	1	128	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 226	1	88	-2.481454e-02	-9.425747e-03	1.922352e-02	-6.480212e-03
## 227	0	150	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 228	0	64	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 229	1	127	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 230	1	47	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 231	0	140	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 232	0	136	-2.380583e-02	5.276783e-02	-1.336798e-02	-1.048884e-02
## 233	0	68	-1.394748e-02	1.730725e-02	2.946209e-03	7.440886e-03
## 234	1	151	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 235	1	152	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 236	0	84	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 237	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 238	0	133	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 239	0	116	-1.068004e-02	1.786577e-03	1.534912e-02	3.117943e-03
## 240	1	75	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 241	1	134	-9.649179e-03	4.381433e-03	7.684838e-03	-3.679701e-03
## 242	0	136	-1.584403e-02	1.642385e-02	4.476556e-03	1.289252e-02
## 243	1	138	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 244	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 245	0	139	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 246	1	132	-1.545288e-02	-5.547247e-03	2.827712e-02	2.193725e-02
## 247	0	82	-1.303906e-02	-1.124744e-03	1.225354e-02	3.475009e-03
## 248	1	113	-5.457119e-02	-3.876129e-02	-1.895725e-02	-5.198018e-02
## 249	0	151	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 250	0	83	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 251	0	75	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 252	0	82	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 253	0	80	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 254	0	90	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 255	1	125	-1.054617e-02	3.206936e-03	1.666826e-02	1.180834e-02
## 256	1	152	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 257	1	61	-2.457766e-02	-2.158865e-02	-4.085974e-02	-1.499375e-03
## 258	0	83	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 259	0	116	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 260	1	153	-2.364825e-02	1.891477e-03	-2.450015e-02	2.477638e-03
## 261	1	101	-1.993182e-02	4.071450e-03	2.733186e-02	8.606545e-03
## 262	1	117	-9.687323e-03	-3.184667e-03	1.017311e-02	3.465198e-02
## 263	0	140	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 264	0	123	-8.774696e-03	6.639616e-03	9.497457e-03	1.228373e-02
## 265	0	107	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 266	1	78	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 267	0	78	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 268	1	72	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 269	1	120	-4.421553e-02	-2.493863e-02	2.885341e-02	-5.951748e-02
## 270	1	106	-2.629229e-02	-1.797650e-02	-2.785693e-02	-1.842248e-02
## 271	0	125	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 272	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 273	1	122	-1.611037e-02	2.108262e-03	8.987414e-03	3.390578e-02
## 274	1	140	-1.444663e-02	-1.010757e-02	1.344568e-02	-3.543053e-02
## 275	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 276	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 277	0	130	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 278	1	152	-1.609654e-02	-5.365748e-03	2.098853e-02	-2.412542e-02

## 279	0	99	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 280	1	156	-2.659094e-02	-1.337909e-03	3.211180e-02	2.836367e-02
## 281	0	143	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 282	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 283	0	124	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 284	1	101	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 285	0	150	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 286	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 287	1	149	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 288	1	94	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 289	1	82	-1.197154e-02	-7.571885e-03	1.965736e-02	-2.617237e-02
## 290	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 291	0	129	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 292	1	159	-1.642145e-02	-1.241683e-02	-2.325350e-02	7.061078e-04
## 293	1	69	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 294	1	159	-1.879771e-02	-5.088213e-03	3.211747e-02	4.943021e-04
## 295	0	102	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 296	0	127	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 297	1	135	-1.694901e-02	2.304347e-03	2.609352e-02	9.741616e-03
## 298	1	125	-1.650117e-02	-7.987194e-03	3.982267e-02	-2.261907e-02
## 299	0	101	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 300	1	131	-6.236393e-02	-4.531273e-02	-6.232754e-02	-1.387709e-02
## 301	1	113	-2.160191e-02	-1.542413e-02	-8.380686e-03	-8.725199e-03
## 302	1	83	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 303	1	74	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 304	0	105	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 305	0	113	-1.896803e-02	-3.653227e-03	9.166506e-03	6.468583e-03
## 306	1	109	-2.961531e-02	-1.707894e-02	3.329296e-02	-4.787525e-02
## 307	0	140	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 308	1	150	-2.770379e-02	-1.644570e-02	4.302865e-02	-6.671834e-02
## 309	1	58	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 310	1	147	-2.181252e-02	-5.333703e-03	-2.261338e-02	4.110149e-03
## 311	1	71	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 312	0	139	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 313	1	106	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 314	1	152	-4.996252e-02	-2.781242e-02	3.204797e-02	-5.649510e-02
## 315	1	152	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 316	0	93	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 317	0	113	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 318	0	54	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 319	0	129	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 320	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 321	1	103	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 322	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 323	0	104	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 324	1	120	-1.513981e-02	-4.271608e-03	3.294651e-02	5.954318e-03
## 325	0	101	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 326	0	105	-1.229541e-02	-1.204889e-03	7.008649e-03	1.073819e-02
## 327	1	128	-4.166676e-02	-2.707138e-02	-1.428553e-02	-4.131759e-02
## 328	0	136	-1.132005e-02	4.554644e-03	-2.446923e-03	6.397615e-03
## 329	0	145	-1.465878e-02	-3.635167e-03	1.345868e-03	4.880886e-03
## 330	1	87	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 331	1	138	-1.609702e-02	-6.844777e-03	2.328442e-02	3.608599e-02
## 332	1	88	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03

## 333	0	74	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 334	0	149	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 335	1	148	-2.517309e-02	-1.763894e-02	5.331901e-03	-2.868982e-02
## 336	1	94	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 337	0	139	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 338	1	99	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 339	1	64	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 340	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 341	0	136	-8.911789e-03	-7.613785e-04	-1.848694e-03	1.858504e-03
## 342	0	85	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 343	1	102	-1.768345e-02	1.779873e-02	1.635012e-02	1.141741e-02
## 344	1	47	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 345	0	155	-1.516195e-02	-3.952398e-03	1.633924e-02	-1.887785e-03
## 346	0	136	-2.594441e-02	2.804613e-02	-4.779298e-03	1.556525e-03
## 347	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 348	0	58	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 349	0	138	-1.248210e-02	3.776925e-03	2.443721e-02	4.857443e-03
## 350	1	77	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 351	0	115	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 352	0	70	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 353	1	69	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 354	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 355	1	128	-1.305072e-02	-2.214424e-03	2.892291e-02	-2.528081e-03
## 356	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 357	0	98	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 358	0	95	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 359	0	87	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 360	1	109	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 361	0	137	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 362	0	114	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 363	0	136	-2.139757e-02	4.745181e-02	-1.276975e-02	-1.502795e-02
## 364	0	147	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 365	1	137	3.420363e-20	1.151152e-19	-6.207941e-19	-2.158420e-19
## 366	0	136	-3.488502e-02	-1.463631e-02	-1.206693e-02	-7.110679e-03
## 367	0	136	-1.738854e-02	1.885059e-02	-3.761561e-04	-6.836365e-04
## 368	0	45	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 369	0	136	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 370	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 371	0	83	-1.273884e-02	2.749454e-02	-7.960688e-03	-1.245700e-02
## 372	0	78	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 373	1	49	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 374	0	139	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 375	1	140	-1.654912e-02	-2.734483e-03	9.047621e-03	3.512737e-02
## 376	0	66	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 377	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 378	0	99	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 379	1	70	-9.649179e-03	4.381433e-03	7.684838e-03	-3.679701e-03
## 380	0	93	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 381	0	136	-4.569626e-02	9.962328e-02	-2.617798e-02	-2.531168e-02
## 382	1	141	-3.536230e-02	-1.995273e-02	3.648752e-02	-4.485287e-02
## 383	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 384	1	140	-4.792725e-02	-3.316649e-02	9.295632e-03	-3.100084e-02
## 385	0	101	-2.319716e-02	4.895836e-03	1.948960e-02	1.118670e-02
## 386	1	84	-1.195533e-02	-2.682220e-03	2.115550e-02	-2.830729e-03

## 387	0	139	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 388	1	120	-1.488940e-02	-4.232232e-03	1.324011e-02	3.633197e-02
## 389	0	103	-2.722133e-02	-8.849322e-03	6.431446e-03	-3.651039e-02
## 390	0	156	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 391	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 392	0	136	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 393	1	66	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 394	1	109	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 395	1	83	-1.560576e-02	-6.403213e-03	1.577562e-02	3.983489e-02
## 396	1	158	-5.207283e-02	-4.000084e-02	-4.247291e-02	1.049982e-02
## 397	0	122	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 398	1	108	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 399	0	133	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 400	1	94	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 401	0	65	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 402	0	113	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 403	1	130	-5.781693e-02	-4.124347e-02	-8.634691e-04	-2.984247e-02
## 404	0	30	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 405	1	140	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 406	1	46	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 407	0	129	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 408	0	136	-1.132005e-02	4.554644e-03	-2.446923e-03	6.397615e-03
## 409	0	93	-9.414961e-03	-1.078609e-03	1.314467e-02	-4.910167e-03
## 410	1	120	-3.596429e-02	-1.777589e-02	2.917621e-02	-2.808476e-02
## 411	1	147	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 412	1	151	-2.681956e-02	-1.737915e-03	3.438185e-02	-1.082819e-02
## 413	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 414	1	127	-3.198425e-02	-1.515001e-04	3.642264e-02	-1.470274e-02
## 415	1	120	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 416	1	134	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 417	1	110	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 418	0	57	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 419	1	122	-2.900143e-02	-1.918604e-03	3.518430e-02	-1.356767e-02
## 420	1	130	-3.103699e-02	-2.091316e-02	2.331655e-02	-5.515601e-02
## 421	0	138	-1.068004e-02	1.786577e-03	1.534912e-02	3.117943e-03
## 422	0	122	-1.738854e-02	1.885059e-02	-3.761561e-04	-6.836365e-04
## 423	1	129	-1.254665e-02	-1.585275e-03	2.061197e-02	8.497947e-03
## 424	1	61	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 425	1	140	-3.264705e-02	-1.911932e-02	5.878515e-02	-8.059956e-02
## 426	1	140	-3.113362e-02	-1.660731e-02	1.130900e-02	7.205361e-02
## 427	0	115	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 428	1	154	-2.410020e-02	-1.296631e-02	4.338807e-02	-3.217398e-02
## 429	0	106	-1.014071e-02	8.088037e-03	1.223955e-02	6.400297e-03
## 430	1	98	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 431	1	110	-1.167597e-02	-5.402271e-03	1.075250e-04	6.015956e-03
## 432	0	62	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 433	1	139	-2.112651e-02	-1.709939e-02	-7.688838e-03	-1.689836e-02
## 434	1	115	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 435	1	56	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 436	1	150	-1.735788e-02	-9.021804e-03	2.437377e-02	-2.042143e-02
## 437	1	136	-5.283326e-02	4.227746e-02	-1.117642e-02	8.235837e-02
## 438	0	51	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 439	1	95	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 440	1	121	-1.254300e-02	-6.517212e-03	2.147288e-02	-1.065117e-02

## 441	1	140	-1.360499e-02	-7.574416e-03	2.725899e-02	-2.673925e-02
## 442	1	38	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 443	1	43	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 444	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 445	1	68	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 446	1	156	-2.069416e-02	-1.055830e-02	2.832144e-02	-1.583101e-02
## 447	1	64	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 448	0	136	-1.584403e-02	1.642385e-02	4.476556e-03	1.289252e-02
## 449	1	94	-3.187737e-02	-1.322737e-02	1.787380e-02	4.800319e-02
## 450	1	140	-1.209563e-02	-1.388362e-03	2.733032e-02	1.239473e-02
## 451	0	100	-1.738854e-02	1.885059e-02	-3.761561e-04	-6.836365e-04
## 452	0	136	-2.382718e-02	4.360501e-02	-6.115543e-03	2.443750e-03
## 453	1	88	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 454	1	134	-3.147341e-02	-1.068198e-02	1.329329e-03	3.468226e-03
## 455	1	102	-2.386832e-02	-1.420515e-02	3.009840e-02	-5.089763e-02
## 456	1	159	-2.644833e-02	-1.155236e-02	2.728483e-02	-2.126268e-02
## 457	1	128	-2.616815e-02	-1.008129e-03	4.235324e-02	2.266336e-02
## 458	1	106	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 459	1	158	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 460	1	118	-1.595312e-02	-6.160470e-03	1.115575e-02	-1.582795e-02
## 461	0	69	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 462	0	134	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 463	0	84	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 464	1	47	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 465	0	137	-1.132005e-02	4.554644e-03	-2.446923e-03	6.397615e-03
## 466	0	112	-2.380583e-02	5.276783e-02	-1.336798e-02	-1.048884e-02
## 467	0	121	-2.517346e-02	2.000327e-02	8.642566e-03	-2.590318e-05
## 468	0	136	-3.439350e-02	5.460588e-02	-4.623360e-03	9.413491e-04
## 469	0	113	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 470	1	95	-3.717266e-02	-2.609419e-02	-1.052579e-03	-3.093556e-03
## 471	0	131	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 472	0	136	-4.333923e-02	9.505988e-02	-2.451360e-02	-2.020011e-02
## 473	0	59	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 474	0	55	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 475	1	127	-2.431811e-02	-9.530439e-03	5.996095e-03	5.376808e-02
## 476	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 477	0	135	-1.014071e-02	8.088037e-03	1.223955e-02	6.400297e-03
## 478	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 479	1	115	-2.720324e-02	-1.539799e-02	-3.521241e-03	-2.741589e-02
## 480	0	113	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 481	1	128	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 482	1	129	-1.645775e-02	2.745910e-03	1.858472e-02	1.349052e-02
## 483	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 484	1	135	-2.440128e-02	-1.167920e-02	2.201917e-02	3.020249e-02
## 485	0	134	-2.554278e-02	4.209020e-02	3.179398e-03	-3.075605e-03
## 486	1	139	-1.734286e-02	1.416210e-03	3.007328e-02	-1.827223e-02
## 487	1	97	-1.816131e-02	-1.474730e-02	-7.366954e-03	-6.266841e-03
## 488	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 489	0	89	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 490	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 491	0	149	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 492	1	58	-1.919995e-02	-3.775817e-03	3.840138e-02	2.196242e-02
## 493	0	118	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 494	1	138	-4.633622e-02	-2.780298e-02	1.113917e-02	-1.707584e-02

## 495	1	147	-1.879913e-02	-1.565202e-03	3.078238e-02	1.194767e-02
## 496	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 497	1	102	-1.155794e-02	-4.778780e-03	2.545341e-02	6.337575e-03
## 498	1	58	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 499	1	147	-2.266127e-02	-6.180304e-03	1.922960e-02	3.910821e-02
## 500	1	83	-1.326971e-02	1.171159e-02	5.387778e-04	3.067855e-02
## 501	0	94	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 502	0	49	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 503	0	112	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 504	1	150	-1.737184e-02	-9.834546e-03	2.679491e-02	-3.007409e-02
## 505	1	99	-1.447128e-02	1.789748e-02	9.900721e-03	4.698256e-03
## 506	1	104	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 507	0	140	-7.732455e-03	2.772014e-03	1.283778e-02	1.861186e-03
## 508	1	139	-1.408951e-02	-8.265138e-03	-2.327143e-02	-4.425544e-03
## 509	1	129	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 510	1	86	-5.404164e-02	-3.894866e-02	-5.055977e-02	-2.882003e-02
## 511	1	96	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 512	1	139	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 513	1	62	-1.625242e-02	2.787183e-03	1.469635e-02	4.318763e-02
## 514	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 515	1	137	-2.929435e-02	-6.957092e-03	4.691146e-02	6.512941e-03
## 516	1	107	-4.295967e-02	-3.466300e-02	-4.031239e-02	-1.344813e-02
## 517	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 518	0	129	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 519	1	130	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 520	1	140	-1.062455e-02	-1.378101e-03	1.714041e-02	6.608753e-04
## 521	1	139	-1.935198e-02	-1.044820e-02	3.045355e-02	-2.371687e-02
## 522	1	120	-2.865526e-02	-2.330029e-02	-4.779189e-02	-4.574160e-03
## 523	1	139	-1.359410e-02	-3.249148e-03	1.425133e-02	-1.618502e-02
## 524	0	75	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 525	1	119	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 526	0	110	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 527	0	138	-1.308189e-02	-1.874501e-05	3.044111e-03	7.688731e-03
## 528	0	77	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 529	1	103	-2.033705e-02	-1.218664e-02	2.647303e-02	-4.070561e-02
## 530	1	139	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 531	1	87	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 532	0	136	-1.462436e-02	2.349148e-02	-2.332375e-03	-4.841089e-03
## 533	1	137	-1.444663e-02	-1.010757e-02	1.344568e-02	-3.543053e-02
## 534	1	102	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 535	1	145	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 536	1	79	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 537	1	119	-3.216027e-02	-7.949223e-03	3.901947e-02	-4.107667e-02
## 538	0	81	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 539	1	45	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 540	1	101	-8.531862e-03	-1.562181e-03	2.119944e-02	1.378325e-02
## 541	1	57	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 542	0	105	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 543	1	131	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 544	1	122	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 545	1	84	-1.268870e-02	-9.063541e-04	2.632090e-02	1.777979e-02
## 546	0	84	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 547	0	121	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 548	1	105	-1.699422e-02	-1.048015e-02	2.693246e-02	-5.193022e-02

## 549	0	79	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 550	1	83	-2.544238e-02	-1.307640e-02	4.125596e-02	-2.428812e-02
## 551	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 552	1	138	-1.297031e-02	-7.927574e-03	9.917403e-03	-1.469288e-02
## 553	0	123	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 554	0	108	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03
## 555	0	111	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 556	1	77	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 557	1	124	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 558	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 559	1	107	-1.581490e-02	-6.855317e-03	3.087912e-02	1.629372e-03
## 560	1	118	-1.509696e-02	4.409669e-03	2.572267e-02	2.231890e-02
## 561	1	139	-3.273445e-02	-1.132736e-02	5.031494e-02	-2.383549e-02
## 562	1	116	7.610992e-20	3.055084e-19	-1.463157e-18	-5.446120e-19
## 563	1	60	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 564	0	145	-1.560390e-02	-4.831689e-03	7.598842e-03	2.919901e-03
## 565	1	117	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 566	0	139	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 567	1	81	-1.630758e-02	-3.773870e-03	3.705284e-02	9.333831e-03
## 568	1	107	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 569	0	79	-1.518560e-02	-7.944260e-03	-3.347159e-03	-1.513201e-02
## 570	1	124	-4.958755e-02	-4.366649e-02	-7.978119e-02	-3.972948e-03
## 571	1	92	-1.799563e-02	-5.156120e-03	3.112883e-02	-3.156623e-02
## 572	0	137	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 573	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 574	0	127	-1.197660e-02	8.830629e-04	1.746136e-02	4.430105e-03
## 575	0	134	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 576	0	54	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 577	1	113	-2.572402e-02	-1.158683e-02	3.136536e-02	-5.004291e-02
## 578	1	123	-2.979252e-02	-6.214724e-03	2.803482e-02	5.062943e-02
## 579	0	91	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 580	1	59	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 581	0	105	-1.268314e-02	8.832171e-03	9.699095e-03	3.856667e-03
## 582	1	139	-3.523850e-02	-2.334315e-02	-9.653926e-03	5.572005e-02
## 583	0	137	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 584	1	82	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 585	1	130	-3.093275e-02	-2.143722e-04	-5.580715e-02	-7.972590e-03
## 586	1	129	-1.630616e-02	-7.296881e-03	3.838793e-02	-2.119534e-03
## 587	0	47	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 588	1	95	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 589	1	108	-2.415860e-02	1.471282e-02	2.007384e-02	3.935024e-02
## 590	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 591	0	138	-2.654702e-02	-1.069312e-02	2.981265e-02	-5.138236e-02
## 592	0	132	-1.404503e-02	1.353357e-02	4.898801e-03	1.174837e-02
## 593	1	34	-1.646089e-02	-1.241306e-02	2.459223e-03	-2.108068e-02
## 594	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 595	0	80	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 596	1	151	-1.992219e-02	-7.706638e-03	1.832665e-02	4.791251e-03
## 597	0	134	-1.132005e-02	4.554644e-03	-2.446923e-03	6.397615e-03
## 598	1	119	-3.264352e-02	-1.177340e-02	-6.881911e-03	3.318635e-02
## 599	1	136	-6.179034e-02	-5.337786e-02	-8.436669e-02	-1.796988e-02
## 600	1	151	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 601	0	75	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 602	0	69	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03

## 603	1	98	-3.645554e-02	-2.424893e-02	-1.203214e-03	-4.032784e-02
## 604	1	133	-2.048164e-02	-5.415826e-03	3.108928e-02	5.176314e-03
## 605	1	121	-1.729728e-02	-4.702354e-03	1.204675e-02	-1.052072e-02
## 606	1	138	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 607	1	136	-1.477011e-02	-4.877534e-03	3.190280e-02	1.305673e-02
## 608	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 609	1	87	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 610	0	137	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 611	1	139	-2.267948e-02	1.324395e-02	2.439781e-02	1.325547e-02
## 612	0	155	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 613	1	143	-2.274264e-02	-9.739488e-03	1.805213e-02	1.610244e-02
## 614	0	154	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 615	0	110	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 616	0	138	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 617	1	136	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 618	1	121	-5.218073e-02	-3.621125e-02	-2.837068e-02	-1.530972e-02
## 619	1	56	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 620	0	79	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 621	1	79	-1.642145e-02	-1.241683e-02	-2.325350e-02	7.061078e-04
## 622	1	112	-3.514157e-02	-2.441471e-02	1.714436e-02	-4.854440e-02
## 623	0	136	-1.218563e-02	2.188063e-02	-2.544825e-03	6.149769e-03
## 624	1	146	-3.237950e-02	-1.427991e-02	1.281650e-02	6.176597e-02
## 625	1	135	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 626	1	63	-9.646667e-03	1.761792e-03	1.687938e-02	1.123626e-02
## 627	1	160	-3.408304e-02	-2.172066e-02	1.372398e-03	3.485132e-02
## 628	1	138	-2.181932e-02	-4.223654e-03	3.837281e-02	2.968186e-02
## 629	1	112	-2.207289e-02	-1.010539e-02	2.939415e-02	-1.324881e-02
## 630	1	99	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 631	1	132	-3.479661e-02	-2.575883e-02	-3.429085e-02	-2.885892e-02
## 632	0	136	-3.613312e-02	-9.610701e-03	4.582752e-03	-3.465188e-02
## 633	0	139	-3.782575e-02	6.989279e-02	-1.135064e-02	-6.373839e-03
## 634	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 635	0	96	-1.402730e-02	1.029029e-02	1.059010e-02	9.163903e-03
## 636	1	139	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 637	0	136	-2.515362e-02	4.181985e-02	4.667533e-04	5.166517e-03
## 638	0	113	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 639	1	122	-3.481384e-02	-1.616711e-02	3.410049e-02	-3.579592e-02
## 640	1	120	-1.622939e-02	-8.078093e-03	1.852151e-02	4.864778e-03
## 641	1	60	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 642	1	152	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 643	1	88	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 644	0	84	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 645	1	135	-3.598666e-02	-2.531102e-02	-6.654802e-03	1.007196e-02
## 646	1	124	-2.587016e-02	-4.216293e-03	3.106504e-02	-2.230262e-02
## 647	1	66	-1.168613e-02	-1.398346e-04	2.484573e-02	1.480872e-02
## 648	0	105	-9.561172e-03	7.825760e-03	5.532919e-03	9.234268e-03
## 649	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 650	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 651	0	136	-1.450423e-02	1.745286e-03	-1.520412e-03	2.735198e-02
## 652	1	154	-3.231648e-02	-1.680141e-02	4.442190e-02	-2.325553e-02
## 653	0	107	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 654	0	149	-1.211343e-02	-1.550196e-03	1.329025e-02	1.076700e-02
## 655	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 656	1	95	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02

## 657	1	81	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 658	0	94	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 659	1	75	-3.668586e-02	-2.748012e-02	-3.881392e-02	3.542383e-03
## 660	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 661	0	123	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 662	0	143	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 663	1	125	-2.629080e-02	-1.185823e-02	6.415441e-03	3.699919e-02
## 664	0	130	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 665	1	126	-4.774801e-02	-3.781915e-02	-7.443356e-02	1.807310e-02
## 666	1	37	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 667	1	153	-3.034044e-02	-2.046680e-02	7.733940e-03	-7.019556e-03
## 668	0	121	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 669	0	150	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 670	1	78	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 671	1	83	-1.982392e-02	2.818586e-04	1.322963e-02	3.441608e-02
## 672	0	137	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 673	1	124	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 674	1	116	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 675	0	137	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 676	1	149	-2.095194e-02	-7.066387e-03	1.135118e-02	3.284252e-02
## 677	0	99	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 678	1	70	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 679	1	68	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 680	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 681	0	125	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 682	1	138	-1.711537e-02	-1.214436e-02	-7.962281e-03	7.536056e-03
## 683	0	131	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 684	1	134	-3.319730e-02	-1.353156e-02	1.911208e-02	3.445423e-02
## 685	0	121	-9.856911e-03	-1.957900e-03	4.404281e-03	-1.024815e-04
## 686	0	81	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 687	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 688	0	114	-1.310602e-02	1.034588e-02	9.059599e-03	1.024152e-02
## 689	1	127	-2.751361e-02	-1.593753e-02	1.798268e-02	-1.341537e-03
## 690	0	83	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 691	0	150	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 692	1	125	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 693	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 694	0	132	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 695	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 696	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 697	1	132	-1.179484e-02	-4.549341e-03	1.847376e-02	3.499692e-02
## 698	1	75	-1.976213e-02	-5.565306e-03	3.609776e-02	2.352494e-02
## 699	1	115	-3.215617e-02	-1.443255e-02	4.327170e-02	-5.381801e-02
## 700	0	128	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 701	0	136	-2.678864e-02	5.453494e-02	-1.212963e-02	-1.162391e-02
## 702	1	150	-4.996252e-02	-2.781242e-02	3.204797e-02	-5.649510e-02
## 703	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 704	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 705	0	156	-1.546504e-02	7.434558e-03	5.964019e-03	1.059859e-02
## 706	0	123	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 707	1	79	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 708	1	138	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 709	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 710	0	75	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 711	1	84	-4.519142e-02	-2.929686e-02	-3.658288e-03	-1.229977e-02
## 712	1	84	-2.616736e-02	-2.078531e-02	-4.062531e-02	6.244017e-03
## 713	0	62	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 714	1	154	-3.234032e-02	-3.513909e-03	4.764381e-02	1.570806e-02
## 715	1	76	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 716	1	75	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 717	0	93	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 718	1	136	-9.687323e-03	-3.184667e-03	1.017311e-02	3.465198e-02
## 719	0	100	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 720	0	72	-1.450423e-02	1.745286e-03	-1.520412e-03	2.735198e-02
## 721	0	144	-1.305678e-02	2.118535e-03	6.562248e-03	6.059479e-03
## 722	0	67	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 723	1	134	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 724	1	91	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 725	0	91	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 726	0	135	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 727	1	105	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 728	0	93	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 729	0	148	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 730	1	155	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 731	1	84	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 732	1	48	-1.054617e-02	3.206936e-03	1.666826e-02	1.180834e-02
## 733	0	111	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 734	1	139	-1.473465e-02	-2.542037e-03	2.789472e-02	2.153931e-03
## 735	1	153	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 736	1	153	-3.663154e-02	-1.839384e-02	4.819159e-02	-3.682206e-02
## 737	0	59	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 738	0	154	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 739	0	99	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 740	0	125	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 741	1	70	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 742	1	121	-1.379889e-02	-7.104776e-03	2.846196e-02	-2.978783e-02
## 743	0	69	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 744	1	137	-1.510550e-02	-6.184895e-03	1.867982e-02	4.235251e-02
## 745	0	97	-1.507879e-02	-1.803633e-03	3.161598e-04	2.167780e-02
## 746	1	59	-2.616736e-02	-2.078531e-02	-4.062531e-02	6.244017e-03
## 747	1	58	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 748	1	139	-1.785925e-02	1.793502e-02	1.619086e-02	7.363573e-03
## 749	1	69	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 750	1	140	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 751	1	58	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 752	1	139	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 753	1	140	-2.137931e-02	-1.053023e-02	3.703321e-02	-2.262849e-02
## 754	1	115	-1.544731e-02	4.191279e-03	1.165531e-02	8.014120e-03
## 755	1	38	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 756	0	157	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 757	1	121	-2.376072e-02	-1.449014e-02	2.086790e-02	-7.659362e-03
## 758	0	140	-1.530816e-02	4.951972e-03	8.727480e-03	1.225665e-02
## 759	1	67	-1.445465e-02	-4.299684e-03	2.423474e-02	1.275180e-02
## 760	1	110	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 761	1	140	-1.686603e-02	-2.249243e-03	3.975449e-02	-2.002022e-02
## 762	1	78	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 763	1	126	-1.897880e-02	-4.430988e-03	3.251830e-02	4.722850e-03
## 764	0	154	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03

## 765	1	135	-1.539617e-02	1.507644e-03	1.087940e-02	-6.573182e-04
## 766	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 767	0	135	-1.544731e-02	4.191279e-03	1.165531e-02	8.014120e-03
## 768	1	155	-5.730261e-02	-4.036023e-02	-1.340083e-02	2.002297e-02
## 769	1	122	-1.069026e-02	-5.547407e-03	1.895106e-02	-1.085884e-02
## 770	0	138	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 771	0	90	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 772	0	121	-1.308829e-02	7.102600e-03	1.475089e-02	7.657054e-03
## 773	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 774	0	136	-4.127031e-02	5.177314e-02	8.385096e-03	1.901415e-03
## 775	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 776	1	125	-6.589930e-02	-4.084792e-02	-6.295440e-02	-1.132777e-02
## 777	0	116	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 778	1	138	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 779	1	142	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 780	1	146	-1.645775e-02	2.745910e-03	1.858472e-02	1.349052e-02
## 781	1	110	-3.477751e-02	-2.341834e-02	1.068018e-02	-8.490781e-03
## 782	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 783	1	129	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 784	0	127	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 785	1	120	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 786	0	83	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 787	1	84	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 788	0	87	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 789	1	120	-3.160635e-02	-4.945270e-03	3.951428e-02	-5.038778e-02
## 790	0	98	-9.635220e-03	5.194175e-03	5.263698e-03	5.972960e-03
## 791	1	83	-2.326946e-02	-1.404858e-02	1.335910e-02	-3.910456e-03
## 792	1	129	-1.271340e-02	-6.401266e-03	1.442708e-02	2.720630e-02
## 793	0	138	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 794	1	103	-2.657648e-02	-3.916738e-03	3.647035e-02	-1.617588e-02
## 795	1	114	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 796	1	139	-1.630616e-02	-7.296881e-03	3.838793e-02	-2.119534e-03
## 797	1	153	-3.060188e-02	-2.035604e-02	-1.498333e-02	1.797086e-03
## 798	0	137	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 799	0	119	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 800	0	137	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 801	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 802	1	88	-2.118541e-02	-1.099986e-02	3.583024e-02	-1.957992e-02
## 803	0	151	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 804	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 805	0	104	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 806	1	124	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 807	0	49	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 808	1	101	-1.660834e-02	-7.169733e-03	1.725080e-02	4.280597e-02
## 809	0	76	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 810	1	134	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 811	1	131	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 812	1	158	-3.232239e-02	-1.728951e-02	-4.778333e-02	3.134072e-03
## 813	1	150	-2.833511e-02	-2.066151e-02	-7.547643e-03	-2.506710e-02
## 814	1	132	-1.815112e-02	-8.488185e-03	3.831241e-03	3.394878e-02
## 815	1	100	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 816	1	63	-1.086135e-02	-4.295944e-03	1.405623e-02	3.978359e-02
## 817	0	143	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 818	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04

## 819	0	128	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 820	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 821	1	143	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 822	1	136	-3.178626e-02	-2.515076e-02	-4.071854e-02	-9.668107e-03
## 823	0	110	-1.229541e-02	-1.204889e-03	7.008649e-03	1.073819e-02
## 824	1	123	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 825	1	129	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 826	0	136	-2.225910e-02	3.347787e-02	-1.012383e-03	4.442261e-03
## 827	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 828	0	119	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 829	1	113	-5.668540e-02	-3.504444e-02	2.730836e-03	-6.255009e-03
## 830	0	85	-9.856911e-03	-1.957900e-03	4.404281e-03	-1.024815e-04
## 831	1	117	-3.215617e-02	-1.443255e-02	4.327170e-02	-5.381801e-02
## 832	0	102	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 833	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 834	1	136	-1.290730e-02	-5.931627e-03	1.563005e-02	2.415773e-02
## 835	1	112	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 836	1	92	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 837	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 838	0	75	-1.883094e-02	3.747768e-03	2.051266e-02	1.689381e-02
## 839	1	38	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 840	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 841	0	53	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 842	1	149	-2.318392e-02	-6.298243e-03	4.244999e-02	1.234507e-02
## 843	1	146	-1.531083e-02	-6.226168e-03	2.256819e-02	1.265540e-02
## 844	1	151	-2.829933e-02	-1.507711e-02	1.640303e-02	-3.812236e-02
## 845	0	131	-1.211777e-02	-1.069152e-03	1.072305e-02	4.552629e-03
## 846	1	59	-2.037835e-02	-1.513152e-02	-1.068796e-02	2.874972e-02
## 847	1	57	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 848	0	76	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 849	1	47	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 850	1	97	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 851	1	68	-1.625242e-02	2.787183e-03	1.469635e-02	4.318763e-02
## 852	1	66	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 853	0	82	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 854	1	97	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 855	0	93	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 856	0	147	-1.788139e-02	1.825423e-02	-4.164153e-04	-4.785294e-04
## 857	0	66	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 858	1	132	-1.541595e-02	-1.005030e-02	-1.668913e-02	-1.702777e-03
## 859	1	123	-3.721268e-02	-3.178921e-02	-4.350695e-02	-1.647051e-02
## 860	1	121	-1.850480e-02	-4.972549e-05	2.039030e-02	-1.958631e-02
## 861	0	55	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 862	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 863	1	124	-3.275463e-02	-1.777871e-02	-4.584504e-02	2.159874e-03
## 864	1	87	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 865	0	76	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 866	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 867	1	154	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 868	1	94	-1.561011e-02	-5.922170e-03	1.320842e-02	3.362052e-02
## 869	0	136	-4.569626e-02	9.962328e-02	-2.617798e-02	-2.531168e-02
## 870	1	67	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 871	1	133	-2.544200e-02	-7.502001e-03	6.031988e-02	1.272749e-02
## 872	0	136	-4.090962e-02	9.890667e-02	-3.116781e-02	-3.767181e-02

## 873	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 874	0	77	-1.644041e-02	1.675024e-03	1.541959e-02	1.493917e-02
## 875	0	140	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 876	0	67	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 877	0	148	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 878	1	91	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 879	0	135	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 880	0	103	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 881	0	133	4.952374e-20	2.292445e-19	-1.001292e-18	-3.185251e-19
## 882	1	59	-1.713367e-20	-9.735569e-20	3.927553e-19	1.279449e-19
## 883	0	91	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 884	1	153	-3.183536e-02	-2.150793e-02	1.603062e-02	-4.397579e-02
## 885	0	71	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 886	1	156	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 887	1	92	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 888	1	57	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 889	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 890	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 891	1	129	-5.981411e-02	-4.100593e-02	-2.407363e-02	-3.793177e-02
## 892	0	126	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 893	0	36	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 894	0	99	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 895	1	81	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 896	1	147	-3.091612e-02	-2.241154e-02	-4.147312e-02	8.095090e-05
## 897	0	84	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 898	1	85	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 899	0	123	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 900	1	59	-3.236358e-02	-2.132066e-02	3.209964e-03	3.104558e-02
## 901	0	119	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 902	0	61	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 903	0	129	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 904	1	93	-1.494717e-02	-7.684512e-03	2.512687e-02	-1.885339e-02
## 905	0	116	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 906	0	152	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 907	0	136	-5.545228e-02	1.253507e-01	-3.537701e-02	-3.663361e-02
## 908	1	139	-1.211497e-02	-6.777164e-03	2.949015e-02	-3.446984e-02
## 909	1	66	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 910	1	75	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 911	0	131	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 912	1	124	-2.164786e-02	-3.878897e-03	3.596486e-02	2.752133e-02
## 913	1	53	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 914	1	58	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 915	0	136	-1.821991e-02	2.778303e-02	7.238583e-04	6.663319e-03
## 916	1	61	-1.247260e-02	1.046310e-03	2.088119e-02	1.175926e-02
## 917	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 918	0	88	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 919	0	93	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 920	0	91	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 921	0	122	-1.303906e-02	-1.124744e-03	1.225354e-02	3.475009e-03
## 922	0	88	-9.635220e-03	5.194175e-03	5.263698e-03	5.972960e-03
## 923	0	68	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 924	0	108	-1.688505e-02	1.335549e-03	7.029237e-03	9.448806e-03
## 925	0	88	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 926	1	122	-6.038753e-02	-4.893410e-02	-4.409682e-02	1.638659e-02

## 927	1	105	-3.294734e-02	-1.664062e-02	3.808820e-02	-6.775817e-02
## 928	1	139	-2.181932e-02	-4.223654e-03	3.837281e-02	2.968186e-02
## 929	1	96	-1.086135e-02	-4.295944e-03	1.405623e-02	3.978359e-02
## 930	1	91	-2.037835e-02	-1.513152e-02	-1.068796e-02	2.874972e-02
## 931	1	108	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 932	1	156	-5.746990e-03	-2.873789e-03	3.194562e-03	3.022383e-03
## 933	1	154	-2.766945e-02	-1.768424e-03	1.857359e-02	3.896933e-02
## 934	0	105	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 935	0	92	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 936	0	116	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 937	1	76	-1.625242e-02	2.787183e-03	1.469635e-02	4.318763e-02
## 938	0	143	-1.412087e-02	5.976442e-03	5.073018e-03	5.291353e-03
## 939	1	151	-1.475474e-02	-4.570572e-03	2.183872e-02	-1.065102e-03
## 940	0	88	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 941	1	103	-2.472526e-02	-1.123114e-02	4.110532e-02	-6.152240e-02
## 942	0	152	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 943	0	120	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 944	0	60	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 945	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 946	1	131	-6.624442e-02	-4.866002e-02	-5.514527e-02	-4.281696e-02
## 947	1	60	-8.531862e-03	-1.562181e-03	2.119944e-02	1.378325e-02
## 948	1	123	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 949	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 950	1	90	-2.174244e-02	-1.299825e-02	3.986698e-02	-6.038733e-02
## 951	1	92	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 952	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 953	0	60	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 954	0	151	-2.323403e-02	6.386012e-04	2.912493e-03	2.923930e-02
## 955	1	108	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 956	0	136	-3.214983e-02	5.170262e-02	-5.303239e-03	-4.937961e-03
## 957	1	95	-3.253983e-02	-2.189800e-02	2.188753e-02	-5.470255e-02
## 958	0	106	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 959	0	126	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 960	1	140	-8.703314e-03	-1.906938e-03	2.360738e-02	1.594379e-02
## 961	1	67	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 962	1	132	-1.645775e-02	2.745910e-03	1.858472e-02	1.349052e-02
## 963	0	52	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 964	0	132	-3.648904e-02	-1.956762e-02	7.137200e-03	-3.503354e-02
## 965	1	93	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 966	0	32	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 967	0	119	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 968	0	110	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 969	1	53	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 970	0	138	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 971	0	136	-2.763893e-02	5.663542e-02	-1.053882e-02	6.324549e-03
## 972	1	120	-1.575209e-02	-8.449271e-03	1.343385e-02	-1.038976e-03
## 973	0	126	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 974	0	80	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 975	0	122	-8.603244e-03	6.984373e-03	7.089512e-03	1.012320e-02
## 976	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 977	1	139	-1.541595e-02	-1.005030e-02	-1.668913e-02	-1.702777e-03
## 978	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 979	0	131	-1.835728e-02	-7.327770e-03	1.480974e-02	-2.403018e-02
## 980	1	137	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03

## 981	0	136	-1.135669e-02	1.061733e-02	3.116799e-03	1.133900e-03
## 982	0	83	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 983	1	100	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 984	0	155	-2.076554e-02	-2.011747e-03	1.421151e-02	-1.949107e-02
## 985	1	111	-2.339299e-02	-1.276640e-02	5.231166e-03	1.371123e-02
## 986	0	95	-1.014071e-02	8.088037e-03	1.223955e-02	6.400297e-03
## 987	0	129	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 988	1	118	-4.818945e-02	-3.502238e-02	-1.124030e-02	-3.924975e-03
## 989	1	46	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 990	1	111	-3.247892e-02	-1.418616e-02	-5.603803e-03	3.452655e-02
## 991	1	127	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 992	1	98	-1.743746e-02	-2.532580e-03	2.547309e-02	1.161673e-02
## 993	0	120	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 994	1	87	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 995	1	138	-1.834374e-02	-2.244238e-03	2.585076e-02	-1.318876e-02
## 996	1	125	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 997	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 998	1	53	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 999	0	103	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1000	1	151	-2.205315e-02	-1.017067e-02	4.158249e-02	9.028489e-04
## 1001	1	87	-1.495577e-02	-2.281771e-03	1.956062e-02	-1.585408e-02
## 1002	1	120	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1003	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1004	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1005	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1006	0	135	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1007	0	81	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1008	0	96	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 1009	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1010	0	154	-1.636454e-02	8.879702e-03	5.752897e-03	1.117066e-02
## 1011	0	136	-3.235298e-02	6.576222e-02	-1.386759e-02	-3.898592e-03
## 1012	0	138	-2.321489e-02	8.139115e-03	1.379831e-02	1.377117e-02
## 1013	0	72	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1014	1	135	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 1015	1	98	-1.625242e-02	2.787183e-03	1.469635e-02	4.318763e-02
## 1016	1	92	-2.825631e-02	-2.266120e-02	-4.723411e-02	2.232608e-02
## 1017	1	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1018	1	152	-3.666611e-02	-1.479703e-02	1.302335e-02	-2.585315e-02
## 1019	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1020	0	66	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1021	0	151	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1022	1	143	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 1023	1	101	-1.334925e-02	-6.810918e-03	6.889654e-03	2.896541e-02
## 1024	0	137	-1.821991e-02	2.778303e-02	7.238583e-04	6.663319e-03
## 1025	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1026	1	121	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1027	0	139	-1.382972e-02	1.165474e-02	9.007733e-03	1.486744e-02
## 1028	1	150	-3.262049e-02	-2.284697e-02	-1.299715e-03	-1.085360e-02
## 1029	0	136	-3.295742e-02	7.212874e-02	-1.821730e-02	-1.285468e-02
## 1030	1	69	-8.707658e-03	-1.425895e-03	2.104018e-02	9.729415e-03
## 1031	1	144	-2.200989e-02	-5.186967e-03	3.856687e-02	7.213457e-03
## 1032	1	103	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 1033	0	102	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1034	1	57	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03

## 1035	0	60	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1036	1	112	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1037	1	67	-1.268870e-02	-9.063541e-04	2.632090e-02	1.777979e-02
## 1038	1	62	-1.064525e-02	-2.343280e-03	8.616521e-03	3.376305e-02
## 1039	1	136	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1040	1	106	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1041	1	151	-2.269600e-02	-5.694423e-04	2.928808e-02	1.276400e-02
## 1042	0	139	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1043	1	140	-2.238529e-02	-3.397021e-03	2.757257e-02	-4.852618e-02
## 1044	1	92	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 1045	0	131	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1046	0	67	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1047	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1048	0	115	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1049	0	120	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1050	0	149	-1.778870e-02	-1.198340e-04	2.385298e-02	6.471265e-03
## 1051	0	146	-2.219064e-02	1.823617e-02	7.404223e-03	1.109167e-03
## 1052	1	139	-7.359491e-02	-4.521620e-02	-3.270643e-02	-1.469424e-02
## 1053	1	117	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 1054	1	96	-1.883147e-02	-2.904053e-03	2.917721e-02	-2.199501e-02
## 1055	1	61	-2.037835e-02	-1.513152e-02	-1.068796e-02	2.874972e-02
## 1056	0	146	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1057	0	136	-3.594023e-02	7.389585e-02	-1.697895e-02	-1.398975e-02
## 1058	0	151	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1059	1	89	-8.531862e-03	-1.562181e-03	2.119944e-02	1.378325e-02
## 1060	0	89	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1061	1	157	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 1062	0	112	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1063	1	116	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 1064	1	127	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1065	0	93	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1066	1	123	-3.907629e-02	-2.968454e-02	-9.079778e-03	-2.787292e-02
## 1067	0	52	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1068	0	151	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 1069	0	136	-1.925246e-02	-7.728143e-04	1.141411e-02	1.889488e-02
## 1070	1	150	-1.445030e-02	-4.780727e-03	2.680194e-02	1.896617e-02
## 1071	1	153	-3.255749e-02	-2.085102e-02	4.412931e-03	2.799701e-02
## 1072	0	146	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1073	1	149	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 1074	1	98	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1075	1	80	-1.982605e-02	9.817869e-03	-3.129738e-02	-4.682117e-03
## 1076	1	145	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 1077	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1078	1	102	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1079	1	135	-8.531862e-03	-1.562181e-03	2.119944e-02	1.378325e-02
## 1080	0	100	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1081	0	57	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1082	0	79	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 1083	0	135	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1084	1	136	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 1085	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1086	0	157	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1087	0	135	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1088	0	59	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03

## 1089	0	136	-3.051119e-02	5.139363e-02	-5.650580e-03	1.504346e-03
## 1090	1	138	-3.568436e-02	-3.162089e-02	-6.536951e-02	-4.789848e-03
## 1091	1	77	-2.246241e-02	-1.214876e-02	4.729129e-03	5.291336e-02
## 1092	0	135	-9.856911e-03	-1.957900e-03	4.404281e-03	-1.024815e-04
## 1093	1	95	-2.630732e-02	-1.766000e-02	-1.377500e-02	3.174330e-02
## 1094	1	144	-2.748943e-02	-1.587204e-02	4.306154e-02	-5.736495e-02
## 1095	1	153	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 1096	1	139	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 1097	1	137	-4.171128e-02	-2.064968e-02	3.237078e-02	-2.506238e-02
## 1098	1	123	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 1099	0	112	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1100	1	139	-1.699795e-02	-9.244135e-04	3.414154e-02	1.936749e-02
## 1101	1	133	-1.454075e-02	-3.011676e-03	2.669175e-02	5.202505e-03
## 1102	1	105	-1.392293e-02	5.520945e-03	2.183955e-02	1.718729e-02
## 1103	1	135	-2.169723e-02	-2.137540e-04	3.902804e-02	1.284507e-03
## 1104	0	116	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1105	1	108	-2.287798e-02	-2.241358e-04	2.300648e-02	1.273519e-02
## 1106	0	79	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1107	1	64	-1.644123e-02	1.655930e-02	1.369445e-02	1.398199e-02
## 1108	1	118	-1.926706e-02	5.152302e-03	3.061548e-02	2.814913e-02
## 1109	1	134	-1.211638e-02	-3.254153e-03	2.815506e-02	-2.301647e-02
## 1110	1	101	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1111	0	123	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1112	0	96	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 1113	0	53	-1.953340e-02	4.229204e-02	-1.114563e-02	-9.711272e-03
## 1114	0	120	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1115	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1116	1	44	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1117	0	77	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1118	0	157	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1119	1	101	-3.187233e-02	-2.087910e-02	-4.298839e-03	3.479449e-02
## 1120	1	120	-4.086550e-02	-2.684681e-02	1.531037e-02	5.945084e-04
## 1121	1	111	-2.821331e-02	-2.242100e-02	-3.905150e-02	-9.381846e-03
## 1122	0	125	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1123	0	104	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 1124	1	138	-4.865466e-02	-3.954846e-02	-5.545210e-02	-1.948273e-02
## 1125	1	139	-1.473465e-02	-2.542037e-03	2.789472e-02	2.153931e-03
## 1126	0	87	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1127	0	136	-3.201512e-02	5.920530e-02	-1.021141e-02	-6.879669e-03
## 1128	1	125	-3.100050e-02	-1.479958e-02	2.753197e-02	-1.350263e-02
## 1129	1	71	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1130	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1131	0	118	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1132	1	50	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1133	1	133	-2.099684e-02	6.799135e-04	1.641573e-02	4.323893e-02
## 1134	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1135	1	131	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1136	0	138	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1137	0	109	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1138	1	140	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1139	1	125	-2.701693e-02	-1.917846e-02	5.338507e-03	-2.217345e-02
## 1140	0	94	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1141	1	56	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1142	1	64	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03

## 1143	1	67	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1144	1	99	-1.034955e-02	-2.491960e-03	1.779397e-02	-2.714780e-02
## 1145	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1146	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1147	1	120	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 1148	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 1149	1	107	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1150	1	136	-2.681050e-02	-1.797723e-02	1.218370e-03	2.497463e-02
## 1151	1	97	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 1152	1	113	-1.687920e-02	-9.300486e-03	1.340522e-02	-3.028770e-03
## 1153	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1154	0	104	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 1155	1	83	-1.608783e-02	3.744195e-04	1.597446e-02	4.452783e-02
## 1156	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 1157	1	137	-1.822211e-02	-8.076845e-03	3.917201e-02	4.747380e-03
## 1158	0	58	-9.777374e-03	1.656461e-02	-1.946596e-03	1.610658e-03
## 1159	1	146	-1.697036e-02	-8.477803e-03	1.985280e-02	2.249810e-02
## 1160	0	68	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1161	0	108	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1162	0	64	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1163	1	39	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1164	0	154	-2.025122e-02	-1.128503e-03	1.674150e-03	3.037437e-02
## 1165	1	67	-1.006933e-02	-4.585172e-04	2.634948e-02	1.006035e-02
## 1166	0	123	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1167	0	119	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1168	0	129	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1169	0	43	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1170	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1171	1	136	-1.983361e-02	-9.507766e-03	1.833802e-02	-4.476783e-02
## 1172	0	140	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1173	1	119	-1.997703e-02	-8.713044e-03	2.817080e-02	-5.306529e-02
## 1174	0	114	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1175	1	101	-3.051096e-02	-2.068197e-02	-4.652492e-02	-3.719436e-03
## 1176	0	87	-1.450423e-02	1.745286e-03	-1.520412e-03	2.735198e-02
## 1177	1	111	-2.435654e-02	1.516831e-02	3.307301e-03	2.745430e-02
## 1178	0	136	-4.273479e-02	8.869335e-02	-2.016389e-02	-1.124402e-02
## 1179	0	134	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1180	0	78	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1181	0	140	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 1182	1	95	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 1183	1	94	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1184	0	136	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1185	0	132	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 1186	0	134	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1187	1	140	-2.672637e-02	-4.214416e-03	5.397866e-03	5.830719e-02
## 1188	0	127	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1189	1	116	-1.965019e-02	-1.491939e-02	-1.121712e-02	3.839283e-03
## 1190	0	136	-2.678864e-02	5.453494e-02	-1.212963e-02	-1.162391e-02
## 1191	0	100	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1192	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1193	1	124	-1.944371e-02	-1.064595e-02	3.697565e-03	-2.221575e-02
## 1194	1	142	-2.596685e-02	-1.824387e-02	-2.347573e-02	2.367985e-02
## 1195	0	152	-1.544731e-02	4.191279e-03	1.165531e-02	8.014120e-03
## 1196	1	100	-2.181252e-02	-5.333703e-03	-2.261338e-02	4.110149e-03

## 1197	1	46	-2.725245e-02	-1.885652e-02	-7.522025e-03	2.978231e-02
## 1198	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1199	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1200	0	129	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1201	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1202	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1203	0	136	-4.052528e-02	7.248799e-02	-4.101411e-03	-9.653295e-03
## 1204	1	119	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1205	0	70	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1206	0	132	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1207	0	150	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1208	0	130	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1209	1	130	-2.893921e-02	4.480029e-03	-3.345790e-02	1.926583e-02
## 1210	1	127	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1211	0	101	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1212	1	119	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 1213	1	114	-1.305214e-02	1.308587e-03	2.758782e-02	8.925285e-03
## 1214	0	60	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 1215	1	154	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1216	1	139	-1.539366e-02	-1.111997e-03	2.007395e-02	1.425865e-02
## 1217	0	122	-1.211777e-02	-1.069152e-03	1.072305e-02	4.552629e-03
## 1218	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1219	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1220	1	153	-3.275463e-02	-1.777871e-02	-4.584504e-02	2.159874e-03
## 1221	0	136	-2.799728e-02	4.434765e-02	-1.222738e-03	8.273977e-03
## 1222	0	93	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 1223	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1224	1	155	-2.431811e-02	-9.530439e-03	5.996095e-03	5.376808e-02
## 1225	1	138	-2.001849e-02	-1.079362e-02	-2.635846e-02	-1.431970e-03
## 1226	0	72	-9.777374e-03	1.656461e-02	-1.946596e-03	1.610658e-03
## 1227	1	112	-1.454075e-02	-3.011676e-03	2.669175e-02	5.202505e-03
## 1228	1	158	-1.581490e-02	-6.855317e-03	3.087912e-02	1.629372e-03
## 1229	1	140	-1.064525e-02	-2.343280e-03	8.616521e-03	3.376305e-02
## 1230	1	112	-2.166075e-02	-1.103017e-02	3.765569e-04	1.280082e-02
## 1231	0	64	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1232	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1233	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1234	1	140	-4.736032e-02	-3.702316e-02	-6.526198e-02	1.226108e-03
## 1235	1	139	-2.961531e-02	-1.707894e-02	3.329296e-02	-4.787525e-02
## 1236	0	139	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 1237	1	159	-2.192246e-02	1.105365e-03	1.537903e-02	3.594694e-02
## 1238	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1239	1	134	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 1240	0	136	-1.211777e-02	-1.069152e-03	1.072305e-02	4.552629e-03
## 1241	0	136	-4.867907e-02	1.013904e-01	-2.493964e-02	-2.644675e-02
## 1242	1	140	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1243	1	88	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 1244	1	157	-2.316265e-02	-7.907953e-03	1.702242e-02	3.289935e-02
## 1245	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 1246	1	129	-3.011000e-02	-4.657927e-03	1.425521e-02	6.718688e-02
## 1247	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1248	1	76	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1249	1	148	-1.581490e-02	-6.855317e-03	3.087912e-02	1.629372e-03
## 1250	0	99	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03

## 1251	0	82	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1252	0	144	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1253	1	146	-2.928918e-02	-4.278847e-03	7.665917e-03	4.037520e-02
## 1254	1	133	-1.545288e-02	-5.547247e-03	2.827712e-02	2.193725e-02
## 1255	1	105	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1256	1	89	-1.976213e-02	-5.565306e-03	3.609776e-02	2.352494e-02
## 1257	0	79	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1258	0	140	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 1259	1	139	-3.258113e-02	-2.484288e-02	-1.527346e-02	1.475279e-02
## 1260	1	154	-2.084477e-02	-7.883849e-03	3.392305e-02	-3.258253e-02
## 1261	1	98	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 1262	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1263	1	82	-9.863120e-03	-3.048381e-03	1.001386e-02	3.059814e-02
## 1264	1	128	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 1265	0	109	-1.444997e-02	8.069978e-03	2.006019e-02	7.987994e-03
## 1266	1	123	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 1267	1	51	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1268	0	122	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1269	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1270	0	122	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1271	0	123	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1272	1	142	-2.163710e-02	-7.038312e-03	2.006295e-02	2.604504e-02
## 1273	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1274	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1275	0	92	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1276	0	100	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1277	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1278	0	117	-1.061059e-02	-5.653584e-04	1.471927e-02	1.031354e-02
## 1279	0	116	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1280	0	136	-1.913927e-02	-3.668811e-04	6.971990e-03	5.469218e-03
## 1281	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1282	1	73	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 1283	0	156	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1284	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1285	0	136	-1.013573e-02	4.276841e-03	7.369490e-03	3.560087e-03
## 1286	0	123	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 1287	1	129	-2.118130e-02	-8.932245e-03	1.656224e-02	4.069674e-02
## 1288	1	99	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1289	0	121	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1290	1	152	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 1291	0	136	-3.356186e-02	7.849526e-02	-2.256701e-02	-2.181077e-02
## 1292	0	156	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1293	0	138	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1294	1	135	-1.595312e-02	-6.160470e-03	1.115575e-02	-1.582795e-02
## 1295	1	125	-1.151467e-02	2.049225e-04	2.243778e-02	1.264818e-02
## 1296	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1297	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1298	1	127	-2.021986e-02	-1.537008e-02	-2.667030e-02	2.065747e-02
## 1299	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 1300	1	87	-2.037835e-02	-1.513152e-02	-1.068796e-02	2.874972e-02
## 1301	1	106	-1.167599e-02	-4.277123e-03	2.437626e-02	-2.442503e-02
## 1302	1	149	-2.366123e-02	-1.046626e-02	3.827419e-02	-2.212918e-02
## 1303	0	149	-1.465878e-02	-3.635167e-03	1.345868e-03	4.880886e-03
## 1304	1	154	-7.238177e-02	-5.468272e-02	-7.188414e-02	5.644516e-03

## 1305	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1306	1	111	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1307	0	96	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1308	0	95	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03
## 1309	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1310	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1311	0	136	-5.428231e-02	9.684250e-02	-1.045185e-02	1.325332e-02
## 1312	1	140	-5.086995e-02	-3.956515e-02	-6.871667e-02	-1.992186e-02
## 1313	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1314	0	87	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1315	1	143	-2.596685e-02	-1.824387e-02	-2.347573e-02	2.367985e-02
## 1316	1	139	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 1317	0	151	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 1318	0	70	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1319	1	125	-1.303715e-02	4.418966e-03	1.397498e-02	-1.014384e-03
## 1320	1	93	-9.687323e-03	-3.184667e-03	1.017311e-02	3.465198e-02
## 1321	1	154	-2.708229e-02	-1.417133e-02	7.952314e-03	5.792553e-02
## 1322	1	97	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1323	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 1324	1	80	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1325	1	103	-1.168613e-02	-1.398346e-04	2.484573e-02	1.480872e-02
## 1326	0	137	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1327	1	119	-1.561011e-02	-5.922170e-03	1.320842e-02	3.362052e-02
## 1328	0	105	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1329	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1330	0	105	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1331	1	99	-1.545288e-02	-5.547247e-03	2.827712e-02	2.193725e-02
## 1332	0	52	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1333	1	88	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 1334	0	96	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1335	0	130	-1.438486e-02	6.199086e-03	1.686313e-02	8.969216e-03
## 1336	1	126	-1.846039e-02	-9.275055e-03	1.762164e-02	3.022868e-02
## 1337	0	91	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1338	1	62	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 1339	0	136	-3.594023e-02	7.389585e-02	-1.697895e-02	-1.398975e-02
## 1340	1	127	-9.687323e-03	-3.184667e-03	1.017311e-02	3.465198e-02
## 1341	1	136	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 1342	1	136	-4.107543e-02	-2.453776e-02	-6.472939e-02	-1.385807e-03
## 1343	1	117	-1.061129e-02	-5.016252e-03	1.301298e-02	-1.504995e-02
## 1344	0	31	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1345	1	157	-3.327514e-02	-2.532286e-02	-4.456870e-02	4.380169e-04
## 1346	1	83	-2.097938e-02	-1.340628e-03	2.203305e-03	5.528481e-02
## 1347	0	127	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1348	1	135	-5.551653e-02	-4.619498e-02	-8.286822e-02	-9.793739e-04
## 1349	1	94	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1350	1	70	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 1351	0	98	-1.801216e-02	4.843341e-04	7.000614e-03	7.459012e-03
## 1352	0	136	-2.840743e-02	-1.030032e-02	-1.593209e-02	2.816888e-02
## 1353	0	74	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1354	0	101	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1355	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1356	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1357	1	79	-2.259778e-02	-1.414866e-02	2.029424e-02	-4.061037e-02
## 1358	1	121	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02

## 1359	0	123	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1360	1	148	-3.480346e-02	-2.549118e-02	-2.270615e-02	-1.124265e-02
## 1361	1	156	-1.624335e-02	-8.890835e-03	2.094265e-02	-4.787882e-03
## 1362	1	155	-2.523128e-02	-4.410915e-03	4.268871e-02	8.172570e-03
## 1363	0	73	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1364	1	154	-3.185513e-02	-1.922385e-02	-4.563392e-02	1.587801e-03
## 1365	1	55	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1366	0	36	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1367	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1368	1	38	-8.703314e-03	-1.906938e-03	2.360738e-02	1.594379e-02
## 1369	1	127	-2.553461e-02	-1.775467e-02	-2.541402e-02	2.465405e-02
## 1370	0	112	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 1371	1	135	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1372	1	119	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1373	0	101	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1374	1	122	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 1375	1	104	-3.762436e-02	-1.610116e-02	2.106837e-02	5.102557e-02
## 1376	1	93	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 1377	1	139	-9.484587e-03	1.968670e-03	8.962946e-03	-2.339502e-03
## 1378	1	124	-5.902520e-02	-3.712291e-02	-6.612033e-02	-1.236036e-02
## 1379	0	136	-2.380583e-02	5.276783e-02	-1.336798e-02	-1.048884e-02
## 1380	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1381	1	129	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1382	0	49	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1383	0	116	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1384	0	129	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 1385	1	73	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 1386	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1387	1	120	-1.485542e-02	3.188877e-03	2.448890e-02	1.339603e-02
## 1388	0	98	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 1389	0	99	-2.840743e-02	-1.030032e-02	-1.593209e-02	2.816888e-02
## 1390	1	139	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1391	1	90	-1.069026e-02	-5.547407e-03	1.895106e-02	-1.085884e-02
## 1392	1	85	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 1393	0	85	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1394	0	122	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1395	1	120	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1396	1	138	-2.161599e-02	-1.172350e-02	3.141849e-02	-2.750517e-02
## 1397	1	150	-2.616815e-02	-1.008129e-03	4.235324e-02	2.266336e-02
## 1398	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1399	1	135	-2.506628e-02	-1.149831e-02	8.995220e-03	8.119991e-03
## 1400	1	134	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 1401	0	112	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1402	1	127	-6.236393e-02	-4.531273e-02	-6.232754e-02	-1.387709e-02
## 1403	1	156	-2.644241e-02	-2.173380e-03	2.505952e-02	4.126462e-02
## 1404	1	92	-1.071930e-02	-4.974865e-03	8.347300e-03	3.050174e-02
## 1405	1	133	-5.751462e-02	-4.755334e-02	-5.957817e-02	-4.470428e-02
## 1406	1	114	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1407	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1408	0	37	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1409	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 1410	0	120	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1411	0	89	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 1412	1	118	-1.678441e-02	-1.084167e-04	2.737163e-02	1.108181e-02

## 1413	0	99	-1.295893e-02	7.442378e-03	1.475600e-02	6.605426e-03
## 1414	1	137	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 1415	0	112	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1416	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1417	1	127	-3.664131e-02	-2.778691e-02	-4.992379e-02	2.136358e-02
## 1418	0	121	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1419	0	103	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1420	1	154	-3.699513e-02	-2.826699e-02	-2.502352e-02	-1.777139e-04
## 1421	0	133	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1422	1	94	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1423	1	106	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1424	0	122	-1.305678e-02	2.118535e-03	6.562248e-03	6.059479e-03
## 1425	1	116	-3.708161e-02	-1.455349e-02	-4.371570e-02	6.332040e-03
## 1426	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1427	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1428	0	65	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1429	0	117	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1430	1	46	-1.261175e-02	2.856169e-04	2.380902e-02	7.516724e-03
## 1431	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1432	1	130	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1433	1	72	-1.699422e-02	-1.048015e-02	2.693246e-02	-5.193022e-02
## 1434	0	122	-2.475549e-02	1.452922e-02	2.749523e-03	5.540593e-04
## 1435	1	136	-1.793426e-20	-8.527833e-20	3.390398e-19	1.157467e-19
## 1436	0	138	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1437	1	140	-1.577500e-02	-2.583805e-03	3.635885e-02	1.367189e-02
## 1438	0	156	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1439	1	131	-2.149908e-02	-1.132306e-02	1.662841e-02	1.983406e-03
## 1440	0	119	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1441	1	90	-2.389434e-02	-1.680835e-02	-6.593533e-03	6.408202e-03
## 1442	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1443	1	154	-3.178626e-02	-2.515076e-02	-4.071854e-02	-9.668107e-03
## 1444	0	136	-3.654467e-02	8.026237e-02	-2.132866e-02	-2.294584e-02
## 1445	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 1446	1	140	-1.155794e-02	-4.778780e-03	2.545341e-02	6.337575e-03
## 1447	1	111	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1448	1	139	-6.134439e-02	-3.626501e-02	-3.465053e-02	-1.503602e-02
## 1449	1	149	-3.468620e-02	1.606240e-03	-3.026334e-02	2.228821e-02
## 1450	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1451	0	122	-8.603244e-03	6.984373e-03	7.089512e-03	1.012320e-02
## 1452	0	70	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1453	0	80	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1454	0	136	-1.686802e-02	2.639474e-02	-1.652497e-03	1.038220e-03
## 1455	0	90	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1456	1	153	-6.326161e-02	-5.042713e-02	-5.638361e-02	-4.168189e-02
## 1457	0	136	-3.694333e-02	4.854792e-02	6.255752e-03	-2.270751e-03
## 1458	1	73	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1459	0	155	-1.303906e-02	-1.124744e-03	1.225354e-02	3.475009e-03
## 1460	0	77	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1461	1	150	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1462	1	106	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 1463	0	120	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 1464	0	152	-1.835728e-02	-7.327770e-03	1.480974e-02	-2.403018e-02
## 1465	1	135	-8.531862e-03	-1.562181e-03	2.119944e-02	1.378325e-02
## 1466	1	138	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03

## 1467	1	132	-1.807977e-02	6.176773e-03	2.696101e-02	2.118383e-02
## 1468	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1469	1	155	-2.500634e-02	2.348336e-03	3.232468e-02	3.085365e-02
## 1470	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1471	0	101	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1472	0	153	-1.452603e-02	4.246871e-03	1.012482e-02	9.091740e-03
## 1473	1	105	-2.423262e-02	-1.233548e-02	1.894043e-02	5.664779e-02
## 1474	0	82	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1475	1	136	-5.086995e-02	-3.956515e-02	-6.871667e-02	-1.992186e-02
## 1476	0	119	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1477	1	100	-1.424498e-02	-4.739455e-03	2.291358e-02	4.866328e-02
## 1478	0	131	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1479	1	118	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 1480	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1481	1	137	-1.867793e-02	-1.279728e-02	-8.617857e-04	1.393589e-02
## 1482	0	117	-1.900850e-02	1.740301e-02	-4.450389e-04	-2.468323e-03
## 1483	1	88	-1.167599e-02	-4.277123e-03	2.437626e-02	-2.442503e-02
## 1484	0	107	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1485	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1486	0	119	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1487	0	45	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1488	1	136	-1.752247e-02	-1.117479e-02	1.016454e-02	-6.932839e-03
## 1489	0	100	-2.174525e-02	-7.290237e-03	2.109988e-02	-2.136486e-02
## 1490	0	71	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1491	1	106	-2.369381e-02	-5.514579e-03	3.753867e-02	1.189547e-02
## 1492	1	139	-1.804319e-02	-2.627805e-03	3.208707e-02	1.705094e-02
## 1493	1	150	-3.396243e-02	-1.247491e-02	2.435183e-02	5.671214e-02
## 1494	0	155	-1.452169e-02	3.765827e-03	1.269202e-02	1.530611e-02
## 1495	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1496	0	106	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1497	1	136	-2.318921e-02	-8.811798e-03	3.462020e-02	-4.634614e-02
## 1498	1	99	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 1499	0	113	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1500	0	87	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1501	0	129	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1502	0	117	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1503	0	136	-3.594023e-02	7.389585e-02	-1.697895e-02	-1.398975e-02
## 1504	0	94	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1505	1	132	-1.983217e-02	-1.457409e-02	-1.749872e-02	3.810474e-03
## 1506	1	107	-2.227070e-02	-1.369289e-02	2.309906e-02	-1.538995e-02
## 1507	1	73	-1.843569e-02	-3.780143e-03	2.951546e-02	2.080218e-02
## 1508	0	130	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 1509	1	106	-5.661694e-02	-4.243894e-02	-6.552210e-02	-1.689947e-02
## 1510	1	140	-2.372108e-02	-8.002900e-03	-1.714682e-02	-1.760170e-02
## 1511	0	158	-1.435023e-02	4.110584e-03	1.028407e-02	1.314558e-02
## 1512	0	76	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 1513	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1514	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1515	1	128	-3.492699e-02	-2.420900e-02	-3.083408e-02	6.379037e-03
## 1516	1	69	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1517	1	146	-1.445030e-02	-4.780727e-03	2.680194e-02	1.896617e-02
## 1518	1	123	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 1519	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1520	0	99	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 1521	0	129	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1522	0	120	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1523	1	73	-1.443285e-02	-6.801268e-03	1.258951e-02	3.101204e-02
## 1524	1	98	-3.685623e-02	-1.801353e-02	4.157603e-02	-5.609406e-02
## 1525	1	106	-1.369357e-02	7.386803e-03	1.662850e-02	9.333069e-03
## 1526	0	127	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1527	1	129	-3.236358e-02	-2.132066e-02	3.209964e-03	3.104558e-02
## 1528	0	136	-3.201512e-02	5.920530e-02	-1.021141e-02	-6.879669e-03
## 1529	1	140	-2.237270e-02	8.455158e-04	5.169906e-02	2.776653e-02
## 1530	0	95	-2.191177e-02	3.769263e-02	-5.557573e-03	-1.890254e-03
## 1531	0	151	-1.211343e-02	-1.550196e-03	1.329025e-02	1.076700e-02
## 1532	0	85	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1533	0	137	-9.414961e-03	-1.078609e-03	1.314467e-02	-4.910167e-03
## 1534	1	113	-2.240891e-02	-1.299805e-02	3.375682e-03	-3.284727e-02
## 1535	1	142	-1.297031e-02	-7.927574e-03	9.917403e-03	-1.469288e-02
## 1536	1	108	-3.051096e-02	-2.068197e-02	-4.652492e-02	-3.719436e-03
## 1537	0	136	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1538	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1539	0	79	-2.684055e-02	1.528168e-02	9.227545e-03	9.263008e-03
## 1540	0	96	-1.736088e-02	2.579838e-02	-1.692756e-03	1.243327e-03
## 1541	1	74	-1.909624e-02	-9.684706e-03	1.008422e-02	3.198780e-02
## 1542	0	123	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1543	1	59	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 1544	1	138	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1545	0	135	-1.465878e-02	-3.635167e-03	1.345868e-03	4.880886e-03
## 1546	1	144	-2.550540e-02	-1.055491e-02	9.650558e-03	6.073338e-02
## 1547	1	134	-2.423514e-02	-1.141474e-02	3.521553e-02	-6.014903e-02
## 1548	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1549	1	152	-2.213923e-02	-8.090858e-03	1.500564e-02	3.980782e-02
## 1550	0	41	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1551	1	121	-3.536230e-02	-1.995273e-02	3.648752e-02	-4.485287e-02
## 1552	1	149	-4.989835e-02	-2.887008e-02	4.643723e-02	-9.021222e-02
## 1553	0	89	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 1554	1	147	-2.946311e-02	-1.458107e-02	1.650196e-02	4.002235e-02
## 1555	1	81	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1556	0	132	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 1557	0	69	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1558	0	132	-9.414961e-03	-1.078609e-03	1.314467e-02	-4.910167e-03
## 1559	1	157	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 1560	1	99	-1.175184e-02	-4.309141e-03	2.665637e-02	3.289001e-03
## 1561	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1562	0	136	-2.554278e-02	4.209020e-02	3.179398e-03	-3.075605e-03
## 1563	1	136	-5.756002e-02	-3.971716e-02	3.646210e-03	1.205672e-02
## 1564	0	60	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1565	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1566	0	83	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1567	0	84	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1568	0	94	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1569	1	148	-2.410020e-02	-1.296631e-02	4.338807e-02	-3.217398e-02
## 1570	0	124	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1571	0	97	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1572	1	52	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1573	0	139	-1.323877e-02	2.463841e-03	2.806494e-04	6.030670e-03
## 1574	1	136	-1.681367e-02	-7.211005e-03	2.113916e-02	1.310886e-02

## 1575	1	138	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1576	1	69	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1577	1	115	-3.075688e-02	-2.495164e-02	-3.572689e-02	5.488095e-04
## 1578	1	107	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1579	1	54	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1580	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1581	0	136	-3.356186e-02	7.849526e-02	-2.256701e-02	-2.181077e-02
## 1582	1	128	-2.112651e-02	-1.709939e-02	-7.688838e-03	-1.689836e-02
## 1583	1	127	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 1584	1	134	-3.710491e-02	-1.403453e-02	-1.964106e-02	3.010628e-02
## 1585	1	94	-2.037835e-02	-1.513152e-02	-1.068796e-02	2.874972e-02
## 1586	1	112	-1.297031e-02	-7.927574e-03	9.917403e-03	-1.469288e-02
## 1587	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1588	1	104	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 1589	1	127	-1.155794e-02	-4.778780e-03	2.545341e-02	6.337575e-03
## 1590	0	157	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1591	1	87	-9.563837e-03	-3.352379e-03	1.937362e-02	9.633017e-03
## 1592	1	140	-1.858858e-02	-4.636109e-03	1.701396e-02	3.869982e-02
## 1593	1	108	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 1594	1	86	-5.086995e-02	-3.956515e-02	-6.871667e-02	-1.992186e-02
## 1595	0	148	-1.883528e-02	4.228811e-03	1.794546e-02	1.067944e-02
## 1596	1	134	-2.500341e-02	-1.057636e-02	3.614207e-02	-1.424331e-02
## 1597	1	112	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1598	0	90	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1599	1	128	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1600	0	139	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1601	1	125	-1.796913e-02	-8.833491e-03	1.011284e-02	3.397759e-02
## 1602	0	144	-1.560390e-02	-4.831689e-03	7.598842e-03	2.919901e-03
## 1603	0	117	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1604	1	83	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 1605	0	108	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1606	0	131	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 1607	0	136	-1.433951e-02	1.238444e-02	4.355141e-03	-1.169822e-06
## 1608	0	136	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 1609	1	75	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 1610	0	126	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1611	1	129	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1612	1	75	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1613	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1614	1	139	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 1615	1	83	-1.290730e-02	-5.931627e-03	1.563005e-02	2.415773e-02
## 1616	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1617	0	72	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1618	1	121	-2.848640e-02	-1.417634e-02	5.372059e-02	-2.032322e-02
## 1619	0	50	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1620	1	83	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 1621	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1622	1	126	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1623	0	115	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1624	1	64	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1625	0	92	-3.485841e-02	6.679466e-02	-9.798429e-03	-1.580609e-02
## 1626	1	155	-4.039245e-02	-2.814050e-02	-2.395060e-02	-1.013456e-02
## 1627	0	72	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1628	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03

## 1629	1	152	-2.590817e-02	-6.681960e-04	3.573748e-02	1.948315e-02
## 1630	1	67	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1631	0	106	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1632	1	123	-1.821959e-02	-1.827479e-03	2.407575e-02	1.478164e-02
## 1633	1	72	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1634	1	105	-4.405824e-02	-2.277066e-02	-6.349105e-02	-2.520877e-03
## 1635	0	157	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 1636	0	96	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1637	1	87	-1.765591e-02	1.050156e-02	1.087130e-02	4.252932e-02
## 1638	1	143	-2.687350e-02	-1.997318e-02	-4.494276e-03	-1.387598e-02
## 1639	0	94	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1640	0	115	3.728301e-20	1.572998e-19	-7.452114e-19	-2.606260e-19
## 1641	1	119	-2.269600e-02	-5.694423e-04	2.928808e-02	1.276400e-02
## 1642	0	131	-1.305678e-02	2.118535e-03	6.562248e-03	6.059479e-03
## 1643	0	136	-2.607085e-02	4.650827e-02	-5.435664e-03	8.323060e-03
## 1644	1	136	-5.086995e-02	-3.956515e-02	-6.871667e-02	-1.992186e-02
## 1645	0	155	-1.211343e-02	-1.550196e-03	1.329025e-02	1.076700e-02
## 1646	0	109	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1647	1	63	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1648	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1649	0	136	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 1650	0	91	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1651	0	111	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1652	1	120	-1.743746e-02	-2.532580e-03	2.547309e-02	1.161673e-02
## 1653	0	107	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 1654	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1655	0	72	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1656	0	58	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 1657	0	103	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1658	0	80	-8.779041e-03	7.120660e-03	6.930255e-03	6.069357e-03
## 1659	1	128	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 1660	1	134	-1.262948e-02	3.528896e-03	1.811773e-02	1.010119e-02
## 1661	0	105	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 1662	1	147	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1663	0	65	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1664	1	78	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1665	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1666	1	158	-2.919844e-02	-1.657706e-02	1.027206e-02	-9.168822e-04
## 1667	0	124	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1668	1	152	-2.260068e-02	-1.577982e-02	-1.812065e-02	2.754292e-03
## 1669	0	103	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1670	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1671	0	136	-1.209597e-02	-3.570737e-03	-9.221828e-04	2.281287e-02
## 1672	0	141	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1673	0	94	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1674	0	68	-1.644365e-02	2.110995e-02	4.209661e-03	-1.913216e-03
## 1675	1	137	-1.737184e-02	-9.834546e-03	2.679491e-02	-3.007409e-02
## 1676	0	145	-1.305678e-02	2.118535e-03	6.562248e-03	6.059479e-03
## 1677	0	140	-1.550140e-02	-1.512663e-03	1.958039e-02	1.343232e-02
## 1678	1	88	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1679	1	154	-1.445465e-02	-4.299684e-03	2.423474e-02	1.275180e-02
## 1680	0	110	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 1681	1	67	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1682	0	108	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 1683	0	92	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1684	0	139	-2.327246e-02	2.533735e-02	2.236983e-04	2.925511e-03
## 1685	1	154	-2.852965e-02	-1.830830e-02	-2.120768e-02	5.747866e-03
## 1686	0	135	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1687	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1688	1	137	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 1689	0	123	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1690	0	136	-2.225910e-02	3.347787e-02	-1.012383e-03	4.442261e-03
## 1691	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1692	1	137	-2.332884e-02	-1.599194e-02	-1.759149e-02	2.766473e-02
## 1693	1	119	-1.729265e-02	-5.512302e-03	3.307232e-02	-7.654910e-03
## 1694	1	94	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1695	1	92	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1696	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1697	0	95	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1698	1	128	-3.844763e-02	-1.756909e-02	1.265729e-02	6.051701e-02
## 1699	0	86	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1700	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1701	0	58	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1702	0	57	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1703	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1704	1	139	-9.858775e-03	-3.529425e-03	1.258106e-02	3.681251e-02
## 1705	1	156	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1706	1	87	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1707	1	133	-5.127267e-02	-4.004464e-02	-6.380632e-02	4.709092e-02
## 1708	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1709	1	92	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1710	1	113	-2.961531e-02	-1.707894e-02	3.329296e-02	-4.787525e-02
## 1711	0	149	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1712	1	119	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1713	1	158	-2.200989e-02	-5.186967e-03	3.856687e-02	7.213457e-03
## 1714	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1715	1	132	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 1716	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 1717	0	84	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1718	1	60	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1719	1	115	-1.334925e-02	-6.810918e-03	6.889654e-03	2.896541e-02
## 1720	0	92	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1721	0	74	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1722	1	140	-2.068852e-02	-8.490985e-03	2.328813e-02	-1.700794e-02
## 1723	0	54	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1724	1	140	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 1725	1	66	-1.179484e-02	-4.549341e-03	1.847376e-02	3.499692e-02
## 1726	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1727	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1728	1	118	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1729	1	134	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1730	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1731	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1732	0	62	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1733	0	86	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1734	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 1735	1	82	-2.332884e-02	-1.599194e-02	-1.759149e-02	2.766473e-02
## 1736	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03

## 1737	0	139	-1.303906e-02	-1.124744e-03	1.225354e-02	3.475009e-03
## 1738	1	79	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1739	0	131	-2.699455e-02	1.291638e-02	-2.576941e-03	2.346941e-02
## 1740	0	136	-9.718050e-03	1.030835e-02	2.769457e-03	7.576207e-03
## 1741	1	114	-3.712579e-02	-3.595616e-03	6.340576e-03	2.339941e-02
## 1742	0	136	-3.594023e-02	7.389585e-02	-1.697895e-02	-1.398975e-02
## 1743	1	91	-9.457962e-03	-1.318810e-03	4.962059e-03	2.679775e-02
## 1744	1	148	-3.236358e-02	-2.132066e-02	3.209964e-03	3.104558e-02
## 1745	1	156	-3.055107e-02	-1.251620e-02	3.272572e-02	-1.593349e-02
## 1746	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1747	0	102	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1748	0	145	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 1749	0	135	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1750	1	124	-6.557934e-20	-3.330781e-19	1.364770e-18	4.673594e-19
## 1751	0	159	-1.544731e-02	4.191279e-03	1.165531e-02	8.014120e-03
## 1752	1	47	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 1753	1	120	-3.963131e-02	-1.714912e-02	1.270146e-02	-3.648467e-02
## 1754	1	120	-3.587975e-02	-1.850256e-02	2.497428e-02	-3.096302e-02
## 1755	1	82	-1.609654e-02	-5.365748e-03	2.098853e-02	-2.412542e-02
## 1756	0	47	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1757	1	126	-1.373752e-02	-2.454427e-03	2.408411e-02	-2.448248e-02
## 1758	0	121	-7.732455e-03	2.772014e-03	1.283778e-02	1.861186e-03
## 1759	1	64	-1.169047e-02	3.412091e-04	2.227852e-02	8.594345e-03
## 1760	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1761	1	153	-2.102379e-02	-1.216340e-02	-1.642240e-02	5.562136e-03
## 1762	1	63	-1.365989e-02	2.183941e-05	2.453565e-02	1.872455e-02
## 1763	1	125	-1.006791e-02	-3.981528e-03	2.768456e-02	-1.393010e-03
## 1764	0	74	-1.450423e-02	1.745286e-03	-1.520412e-03	2.735198e-02
## 1765	0	68	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1766	1	77	-2.646841e-02	-7.085580e-03	5.187379e-02	-4.312134e-03
## 1767	1	120	-1.071930e-02	-4.974865e-03	8.347300e-03	3.050174e-02
## 1768	1	140	-1.743312e-02	-3.013623e-03	2.804029e-02	1.783110e-02
## 1769	0	136	-3.297877e-02	6.296592e-02	-1.096486e-02	7.790821e-05
## 1770	0	84	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 1771	0	138	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1772	1	140	-7.240921e-03	-9.345897e-04	8.283067e-03	-8.218812e-03
## 1773	0	148	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1774	0	91	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1775	0	139	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1776	0	78	-6.194986e-03	1.668350e-03	7.687741e-03	5.584085e-03
## 1777	1	152	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 1778	0	154	-1.447679e-02	-3.980474e-03	7.627466e-03	4.909695e-03
## 1779	0	133	-1.245344e-02	4.548516e-03	7.780148e-03	6.178088e-03
## 1780	0	95	-1.560390e-02	-4.831689e-03	7.598842e-03	2.919901e-03
## 1781	1	139	-8.703314e-03	-1.906938e-03	2.360738e-02	1.594379e-02
## 1782	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1783	1	46	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1784	1	86	-8.428210e-03	-1.959060e-03	1.193753e-02	-1.253514e-03
## 1785	1	68	-2.481717e-02	-7.682022e-03	2.777453e-03	-2.830816e-02
## 1786	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 1787	1	68	-2.572402e-02	-1.158683e-02	3.136536e-02	-5.004291e-02
## 1788	0	81	-3.054916e-02	6.681272e-02	-1.761907e-02	-1.739379e-02
## 1789	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1790	1	152	-1.737184e-02	-9.834546e-03	2.679491e-02	-3.007409e-02

## 1791	1	137	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 1792	1	93	-1.445030e-02	-4.780727e-03	2.680194e-02	1.896617e-02
## 1793	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1794	1	67	-3.568436e-02	-3.162089e-02	-6.536951e-02	-4.789848e-03
## 1795	1	69	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1796	1	67	-2.572402e-02	-1.158683e-02	3.136536e-02	-5.004291e-02
## 1797	1	80	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 1798	0	94	-1.132005e-02	4.554644e-03	-2.446923e-03	6.397615e-03
## 1799	1	70	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 1800	1	48	-8.703314e-03	-1.906938e-03	2.360738e-02	1.594379e-02
## 1801	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1802	1	131	-6.520329e-02	-4.346769e-02	-6.298960e-02	2.706136e-02
## 1803	1	104	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 1804	1	90	-1.151467e-02	2.049225e-04	2.243778e-02	1.264818e-02
## 1805	1	88	-1.459233e-02	-4.496711e-03	1.829370e-02	-6.999569e-03
## 1806	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1807	1	140	-7.240921e-03	-9.345897e-04	8.283067e-03	-8.218812e-03
## 1808	0	140	-8.911789e-03	-7.613785e-04	-1.848694e-03	1.858504e-03
## 1809	1	106	-3.236358e-02	-2.132066e-02	3.209964e-03	3.104558e-02
## 1810	0	143	-1.516195e-02	-3.952398e-03	1.633924e-02	-1.887785e-03
## 1811	1	136	-5.649454e-02	-3.688709e-02	-8.444807e-02	-3.546036e-03
## 1812	1	153	-3.178626e-02	-2.515076e-02	-4.071854e-02	-9.668107e-03
## 1813	0	78	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1814	0	108	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1815	1	139	-1.261439e-02	2.029342e-03	7.362955e-03	-1.431122e-02
## 1816	0	125	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1817	1	69	-1.437858e-02	-4.765766e-04	3.417011e-02	1.164805e-02
## 1818	0	136	-3.356186e-02	7.849526e-02	-2.256701e-02	-2.181077e-02
## 1819	0	105	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1820	1	92	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 1821	1	66	-1.359410e-02	-3.249148e-03	1.425133e-02	-1.618502e-02
## 1822	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1823	0	137	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 1824	0	150	-3.056007e-02	-1.703913e-02	1.022424e-02	-3.802712e-02
## 1825	1	160	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 1826	1	111	-4.021052e-02	-2.970561e-02	-2.818668e-02	3.256020e-02
## 1827	0	108	-1.226517e-02	3.358123e-03	3.806052e-03	4.436629e-03
## 1828	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 1829	0	40	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1830	1	136	-9.113161e-03	-5.337841e-03	-2.160525e-03	2.394794e-02
## 1831	0	77	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1832	1	121	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 1833	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1834	0	136	-4.026721e-02	7.712107e-02	-1.484961e-02	-9.817584e-03
## 1835	1	96	-1.445465e-02	-4.299684e-03	2.423474e-02	1.275180e-02
## 1836	0	29	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1837	0	41	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1838	1	148	-4.741375e-02	-2.994516e-02	-1.109097e-02	-3.829521e-02
## 1839	1	60	-2.561932e-21	-9.317825e-21	4.666033e-20	1.627929e-20
## 1840	0	136	-3.831861e-02	6.929643e-02	-1.139090e-02	-6.168732e-03
## 1841	1	117	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1842	0	111	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1843	0	111	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 1844	1	137	-2.084395e-02	1.535880e-03	2.891723e-02	2.534129e-02

## 1845	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1846	0	154	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1847	1	49	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1848	0	81	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1849	1	112	-1.843569e-02	-3.780143e-03	2.951546e-02	2.080218e-02
## 1850	0	120	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1851	1	76	-3.710587e-02	-2.564858e-02	-3.984363e-02	2.033930e-02
## 1852	0	149	-1.546504e-02	7.434558e-03	5.964019e-03	1.059859e-02
## 1853	0	112	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1854	1	68	-1.983361e-02	-9.507766e-03	1.833802e-02	-4.476783e-02
## 1855	0	73	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1856	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 1857	0	83	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1858	1	143	-2.901572e-02	-7.065041e-03	5.916506e-02	2.706701e-02
## 1859	1	88	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1860	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1861	1	113	-1.581490e-02	-6.855317e-03	3.087912e-02	1.629372e-03
## 1862	1	72	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 1863	1	107	-3.587975e-02	-1.850256e-02	2.497428e-02	-3.096302e-02
## 1864	1	68	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1865	1	87	-1.149398e-02	-5.747578e-03	6.389123e-03	6.044765e-03
## 1866	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1867	0	140	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1868	1	140	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1869	0	130	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1870	1	68	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1871	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 1872	0	98	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1873	0	128	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 1874	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1875	1	114	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1876	1	129	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 1877	0	145	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 1878	1	153	-1.424925e-02	-7.464434e-03	1.486287e-02	-1.492440e-03
## 1879	0	75	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 1880	1	128	-2.756401e-02	-1.230848e-02	3.233495e-02	-3.927176e-02
## 1881	1	137	-1.247260e-02	1.046310e-03	2.088119e-02	1.175926e-02
## 1882	0	114	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 1883	1	91	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 1884	0	139	-1.979679e-02	2.416661e-02	-9.743850e-04	3.855474e-03
## 1885	0	136	-2.999596e-02	6.119882e-02	-1.220320e-02	1.212978e-03
## 1886	1	80	-3.056153e-02	-1.229954e-02	2.241808e-02	-3.457830e-03
## 1887	0	151	-1.546504e-02	7.434558e-03	5.964019e-03	1.059859e-02
## 1888	0	69	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1889	0	124	-9.856911e-03	-1.957900e-03	4.404281e-03	-1.024815e-04
## 1890	0	136	-2.892722e-02	2.981323e-02	-3.540956e-03	4.214550e-04
## 1891	0	118	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1892	1	123	-1.954588e-02	-9.978565e-03	3.165652e-02	-2.676545e-02
## 1893	0	136	-2.299824e-02	3.234171e-02	-4.539190e-04	-2.572119e-03
## 1894	1	106	-4.788714e-02	-4.133225e-02	-6.995501e-02	-1.878678e-02
## 1895	1	97	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1896	1	138	-7.240921e-03	-9.345897e-04	8.283067e-03	-8.218812e-03
## 1897	1	126	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 1898	1	138	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02

## 1899	0	80	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1900	0	105	-8.779041e-03	7.120660e-03	6.930255e-03	6.069357e-03
## 1901	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 1902	1	114	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1903	1	143	-2.550540e-02	-1.055491e-02	9.650558e-03	6.073338e-02
## 1904	0	80	-2.189043e-02	4.685545e-02	-1.281001e-02	-1.482284e-02
## 1905	1	31	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1906	0	137	-2.137833e-02	-1.979718e-03	1.645526e-03	2.838457e-02
## 1907	1	123	-1.290730e-02	-5.931627e-03	1.563005e-02	2.415773e-02
## 1908	1	141	-5.556996e-02	-3.911698e-02	-2.869721e-02	-4.050069e-02
## 1909	0	104	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1910	0	81	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1911	1	92	-1.901670e-02	8.837805e-03	3.733339e-03	3.370094e-02
## 1912	1	87	-1.488086e-02	6.362333e-03	2.028296e-02	1.629837e-02
## 1913	1	77	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1914	1	113	-2.687350e-02	-1.997318e-02	-4.494276e-03	-1.387598e-02
## 1915	1	130	-4.421553e-02	-2.493863e-02	2.885341e-02	-5.951748e-02
## 1916	1	123	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1917	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1918	0	95	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1919	0	136	-2.842787e-02	5.107167e-02	-7.100045e-03	3.211489e-03
## 1920	1	128	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1921	0	102	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1922	0	92	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1923	0	136	-1.829395e-02	2.515145e-02	4.546374e-04	3.402011e-03
## 1924	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 1925	1	136	-3.501499e-02	-2.765333e-02	-2.868216e-02	-6.534932e-03
## 1926	0	136	-2.999596e-02	6.119882e-02	-1.220320e-02	1.212978e-03
## 1927	0	109	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1928	1	115	-2.084619e-02	-4.360838e-03	3.258796e-02	-2.112916e-02
## 1929	0	136	-2.141892e-02	3.828899e-02	-5.517314e-03	-2.095361e-03
## 1930	0	140	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1931	0	114	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1932	1	130	-2.071044e-02	-9.737605e-03	1.616545e-02	3.609305e-02
## 1933	0	92	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1934	0	136	-9.718050e-03	1.030835e-02	2.769457e-03	7.576207e-03
## 1935	0	78	-3.734372e-02	8.161023e-02	-2.080401e-02	-1.464806e-02
## 1936	0	103	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 1937	1	102	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1938	1	123	-5.746990e-03	-2.873789e-03	3.194562e-03	3.022383e-03
## 1939	0	107	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1940	1	52	-1.211425e-02	1.333408e-02	1.156510e-02	9.809827e-03
## 1941	0	104	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1942	1	44	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1943	0	136	-3.235298e-02	6.576222e-02	-1.386759e-02	-3.898592e-03
## 1944	1	144	-1.783827e-02	-4.743194e-03	3.309209e-02	2.163148e-02
## 1945	0	33	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1946	1	133	-3.635457e-02	-7.463371e-03	5.244880e-02	-5.884488e-02
## 1947	0	115	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 1948	1	126	-9.577796e-03	-4.165121e-03	2.179476e-02	-1.964321e-05
## 1949	1	117	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 1950	1	122	-2.783427e-02	-3.933374e-03	4.647931e-02	-2.161676e-02
## 1951	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 1952	1	134	-4.421553e-02	-2.493863e-02	2.885341e-02	-5.951748e-02

## 1953	1	87	-3.980611e-02	-2.567450e-02	-5.496705e-02	2.019970e-02
## 1954	0	160	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1955	1	35	-6.952011e-20	-4.659718e-19	1.539855e-18	5.228841e-19
## 1956	1	96	1.090109e-20	6.034376e-20	-2.505384e-19	-8.087810e-20
## 1957	0	120	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1958	0	36	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1959	0	131	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1960	1	97	-2.557304e-02	6.944081e-03	-2.810282e-02	-1.659734e-03
## 1961	0	58	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1962	1	79	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 1963	1	140	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 1964	0	76	-2.377595e-02	4.285239e-02	-7.181695e-03	-7.206931e-03
## 1965	0	44	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1966	1	122	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 1967	0	95	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 1968	0	130	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1969	0	82	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 1970	0	158	-1.784296e-02	-6.444526e-03	2.272379e-03	2.583526e-02
## 1971	0	51	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1972	0	136	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 1973	0	146	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1974	0	115	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1975	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1976	0	136	-2.380583e-02	5.276783e-02	-1.336798e-02	-1.048884e-02
## 1977	0	136	-1.843611e-02	3.652189e-02	-6.755656e-03	-9.602907e-04
## 1978	1	117	-1.290242e-02	-6.613418e-03	2.442197e-02	-2.316718e-03
## 1979	1	158	-3.289694e-02	-2.026967e-02	2.373593e-02	-2.982795e-02
## 1980	1	139	-1.407352e-02	-4.394698e-03	2.050563e-02	4.650274e-02
## 1981	1	44	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 1982	0	122	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1983	0	131	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 1984	0	41	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1985	0	136	-2.380583e-02	5.276783e-02	-1.336798e-02	-1.048884e-02
## 1986	0	110	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 1987	1	90	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 1988	0	140	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1989	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 1990	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 1991	1	136	-1.006791e-02	-3.981528e-03	2.768456e-02	-1.393010e-03
## 1992	1	135	-1.247260e-02	1.046310e-03	2.088119e-02	1.175926e-02
## 1993	1	69	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 1994	0	155	-1.171261e-02	6.604189e-04	5.671247e-03	7.522423e-04
## 1995	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 1996	1	123	-3.631211e-02	-2.504365e-02	-1.103600e-02	-3.203037e-02
## 1997	1	133	-2.361009e-02	-1.314990e-02	3.749828e-02	-3.080061e-02
## 1998	1	104	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02
## 1999	1	90	-2.217548e-02	6.974710e-03	2.801174e-02	1.448586e-02
## 2000	0	110	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2001	0	136	-2.678864e-02	5.453494e-02	-1.212963e-02	-1.162391e-02
## 2002	1	101	-1.247260e-02	1.046310e-03	2.088119e-02	1.175926e-02
## 2003	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2004	1	132	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 2005	0	98	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 2006	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 2007	1	140	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2008	1	68	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2009	0	117	-1.835728e-02	-7.327770e-03	1.480974e-02	-2.403018e-02
## 2010	0	113	-1.029260e-02	6.759427e-03	4.606029e-03	1.902026e-03
## 2011	0	95	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2012	1	136	-4.295967e-02	-3.466300e-02	-4.031239e-02	-1.344813e-02
## 2013	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2014	1	73	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 2015	1	139	-1.699422e-02	-1.048015e-02	2.693246e-02	-5.193022e-02
## 2016	1	144	-2.472579e-02	-7.304777e-03	3.571286e-02	7.745233e-03
## 2017	1	142	-1.761321e-02	1.123424e-03	7.558392e-03	3.435925e-02
## 2018	1	153	-1.642145e-02	-1.241683e-02	-2.325350e-02	7.061078e-04
## 2019	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2020	0	92	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2021	0	66	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2022	1	137	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 2023	1	130	-1.275781e-02	2.824063e-03	1.719574e-02	-2.260869e-02
## 2024	1	148	-2.278266e-02	-1.543451e-02	-2.440225e-02	2.725483e-03
## 2025	1	75	-1.658780e-02	-5.807312e-03	2.849733e-02	-2.787432e-02
## 2026	0	80	-1.413827e-02	3.908985e-03	6.952708e-05	6.602743e-03
## 2027	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2028	1	87	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2029	1	92	-1.444663e-02	-1.010757e-02	1.344568e-02	-3.543053e-02
## 2030	1	152	-1.954588e-02	-9.978565e-03	3.165652e-02	-2.676545e-02
## 2031	0	68	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2032	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2033	0	115	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2034	0	131	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2035	0	65	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2036	0	110	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2037	1	150	-1.729728e-02	-4.702354e-03	1.204675e-02	-1.052072e-02
## 2038	1	130	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 2039	0	136	-5.138875e-02	9.514379e-02	-1.590521e-02	-2.899689e-03
## 2040	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2041	1	90	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 2042	1	158	-2.260068e-02	-1.577982e-02	-1.812065e-02	2.754292e-03
## 2043	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2044	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2045	0	124	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2046	1	136	-2.572402e-02	-1.158683e-02	3.136536e-02	-5.004291e-02
## 2047	0	140	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2048	0	148	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2049	0	135	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2050	0	156	-1.465878e-02	-3.635167e-03	1.345868e-03	4.880886e-03
## 2051	1	132	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 2052	1	74	-1.071930e-02	-4.974865e-03	8.347300e-03	3.050174e-02
## 2053	1	110	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2054	0	104	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2055	1	91	-1.491861e-02	-1.143199e-02	-2.182447e-02	2.526443e-04
## 2056	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2057	1	120	-1.153257e-02	-5.071844e-03	1.454348e-02	-1.612757e-02
## 2058	1	97	-1.020613e-02	-3.286681e-03	7.961183e-03	-1.885033e-02
## 2059	0	61	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2060	0	134	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03

## 2061	0	136	-3.831861e-02	6.929643e-02	-1.139090e-02	-6.168732e-03
## 2062	0	128	-4.452297e-02	7.876834e-02	-2.550366e-03	5.819893e-03
## 2063	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2064	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 2065	1	103	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2066	1	130	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 2067	0	99	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2068	1	129	-2.112651e-02	-1.709939e-02	-7.688838e-03	-1.689836e-02
## 2069	1	154	-2.706819e-02	-1.012872e-02	3.225636e-02	-4.473567e-02
## 2070	1	78	-9.863120e-03	-3.048381e-03	1.001386e-02	3.059814e-02
## 2071	0	80	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2072	0	126	-8.779041e-03	7.120660e-03	6.930255e-03	6.069357e-03
## 2073	1	49	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2074	0	133	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2075	1	124	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 2076	0	85	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 2077	1	136	-6.578856e-02	-4.495685e-02	-3.003403e-02	4.277575e-03
## 2078	0	78	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2079	1	71	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2080	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2081	1	102	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2082	1	68	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2083	0	135	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2084	1	148	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 2085	0	91	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2086	0	92	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2087	1	78	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2088	1	133	-1.290730e-02	-5.931627e-03	1.563005e-02	2.415773e-02
## 2089	0	152	-1.516195e-02	-3.952398e-03	1.633924e-02	-1.887785e-03
## 2090	1	100	-1.546040e-02	6.624610e-03	2.698959e-02	1.346440e-02
## 2091	0	88	-2.377595e-02	4.285239e-02	-7.181695e-03	-7.206931e-03
## 2092	0	118	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2093	1	145	-3.259812e-02	-1.531184e-02	3.453130e-02	-4.901032e-02
## 2094	1	119	-3.712579e-02	-3.595616e-03	6.340576e-03	2.339941e-02
## 2095	1	140	-2.781988e-02	-1.297918e-02	3.258871e-02	-1.022643e-02
## 2096	0	97	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2097	1	131	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2098	1	111	-2.625227e-02	-1.228148e-02	1.459744e-02	-5.045526e-03
## 2099	0	115	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2100	0	76	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2101	0	79	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2102	1	129	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 2103	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2104	0	120	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 2105	1	141	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2106	0	108	-1.560390e-02	-4.831689e-03	7.598842e-03	2.919901e-03
## 2107	0	133	-6.366438e-03	1.323593e-03	1.009569e-02	7.744617e-03
## 2108	1	93	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2109	0	96	-1.784296e-02	-6.444526e-03	2.272379e-03	2.583526e-02
## 2110	1	155	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 2111	0	122	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2112	1	95	-1.365727e-02	-7.775937e-03	-2.520972e-02	-3.451345e-03
## 2113	1	117	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 2114	0	145	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03

## 2115	1	113	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2116	1	106	-1.619320e-02	7.222433e-03	6.493173e-03	3.550903e-02
## 2117	0	90	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2118	0	154	-1.061059e-02	-5.653584e-04	1.471927e-02	1.031354e-02
## 2119	0	136	-1.013930e-02	4.565026e-03	1.357464e-02	-5.053068e-03
## 2120	1	149	-4.547792e-02	-3.503422e-02	-4.915421e-02	-1.355892e-02
## 2121	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 2122	1	149	-4.421553e-02	-2.493863e-02	2.885341e-02	-5.951748e-02
## 2123	1	134	-5.746990e-03	-2.873789e-03	3.194562e-03	3.022383e-03
## 2124	1	132	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2125	0	85	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 2126	1	149	-3.629381e-02	-1.341517e-02	3.676786e-02	-3.738445e-02
## 2127	1	107	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 2128	1	136	-1.020613e-02	-3.286681e-03	7.961183e-03	-1.885033e-02
## 2129	1	104	-9.457962e-03	-1.318810e-03	4.962059e-03	2.679775e-02
## 2130	0	53	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2131	1	112	-1.531083e-02	-6.226168e-03	2.256819e-02	1.265540e-02
## 2132	0	136	-2.001543e-02	3.057461e-02	-1.692262e-03	-1.437049e-03
## 2133	1	143	-1.940245e-02	-1.077329e-02	2.182373e-02	-1.846798e-02
## 2134	1	78	-2.616736e-02	-2.078531e-02	-4.062531e-02	6.244017e-03
## 2135	1	148	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 2136	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 2137	0	136	-1.061059e-02	-5.653584e-04	1.471927e-02	1.031354e-02
## 2138	0	134	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2139	0	100	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2140	1	90	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2141	0	95	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2142	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2143	0	119	-9.718050e-03	1.030835e-02	2.769457e-03	7.576207e-03
## 2144	0	132	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2145	1	157	-2.084477e-02	-7.883849e-03	3.392305e-02	-3.258253e-02
## 2146	1	118	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2147	1	110	-1.543431e-02	-6.058456e-03	1.336768e-02	3.767436e-02
## 2148	0	88	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2149	1	95	-3.051096e-02	-2.068197e-02	-4.652492e-02	-3.719436e-03
## 2150	0	154	-1.211777e-02	-1.069152e-03	1.072305e-02	4.552629e-03
## 2151	1	92	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2152	0	137	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 2153	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2154	1	77	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 2155	1	160	-2.028774e-02	-5.885465e-03	2.988631e-02	8.224887e-03
## 2156	1	108	-1.006933e-02	-4.585172e-04	2.634948e-02	1.006035e-02
## 2157	1	93	-1.694901e-02	2.304347e-03	2.609352e-02	9.741616e-03
## 2158	1	74	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2159	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2160	1	119	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2161	1	57	-2.476397e-02	-1.780818e-02	-4.971949e-02	-6.741819e-03
## 2162	1	124	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2163	1	156	-3.440225e-02	-2.617408e-02	-4.459733e-02	-1.551777e-03
## 2164	1	86	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 2165	1	136	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2166	1	71	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2167	0	115	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 2168	1	127	-1.741566e-02	-5.034164e-03	1.382786e-02	2.987697e-02

## 2169	1	115	-2.205315e-02	-1.017067e-02	4.158249e-02	9.028489e-04
## 2170	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 2171	1	156	-2.028774e-02	-5.885465e-03	2.988631e-02	8.224887e-03
## 2172	0	120	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2173	0	95	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 2174	0	101	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 2175	0	96	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 2176	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2177	0	136	-3.356186e-02	7.849526e-02	-2.256701e-02	-2.181077e-02
## 2178	1	92	-1.694901e-02	2.304347e-03	2.609352e-02	9.741616e-03
## 2179	0	137	-1.784296e-02	-6.444526e-03	2.272379e-03	2.583526e-02
## 2180	1	122	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 2181	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2182	1	139	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2183	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2184	0	154	-1.303906e-02	-1.124744e-03	1.225354e-02	3.475009e-03
## 2185	1	134	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 2186	1	85	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2187	1	92	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2188	1	113	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2189	1	69	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2190	1	151	-1.311373e-02	-7.132852e-03	1.975019e-02	-2.299035e-02
## 2191	1	101	-2.541524e-02	-1.330087e-02	-7.030477e-03	6.271283e-03
## 2192	1	139	-3.025713e-02	-2.041669e-02	4.363067e-03	-4.996294e-03
## 2193	1	124	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2194	1	135	-9.628941e-03	-1.481487e-03	2.257068e-02	8.651795e-03
## 2195	0	86	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2196	0	136	-2.042059e-02	2.884504e-02	3.359537e-03	2.363338e-03
## 2197	0	84	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2198	0	58	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2199	0	115	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2200	1	160	-2.019362e-02	-1.298136e-02	1.664024e-02	-3.240815e-02
## 2201	1	102	-2.733575e-20	-7.659090e-20	4.565112e-19	1.654634e-19
## 2202	1	133	-3.347272e-02	-2.601603e-02	-2.441556e-03	-3.919277e-02
## 2203	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 2204	0	136	-2.957218e-02	4.820595e-02	-1.489782e-03	-2.503635e-06
## 2205	1	156	-1.796913e-02	-8.833491e-03	1.011284e-02	3.397759e-02
## 2206	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2207	0	136	-4.177115e-02	8.493273e-02	-1.941044e-02	-1.820160e-02
## 2208	0	135	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2209	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2210	0	121	-8.911789e-03	-7.613785e-04	-1.848694e-03	1.858504e-03
## 2211	1	102	-2.169257e-02	-1.043216e-02	1.505734e-02	-1.102611e-03
## 2212	0	55	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2213	0	136	-2.296159e-02	2.627902e-02	-6.017641e-03	2.691595e-03
## 2214	1	104	-1.805700e-02	-9.806470e-03	3.550668e-02	-3.687157e-02
## 2215	0	95	-9.700324e-03	7.065067e-03	8.460752e-03	4.991737e-03
## 2216	1	125	-5.774405e-02	-4.329015e-02	-6.555073e-02	-1.888927e-02
## 2217	1	134	-4.409715e-02	-2.619014e-02	1.646563e-02	-3.999119e-02
## 2218	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2219	0	45	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2220	0	101	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2221	1	92	-3.523850e-02	-2.334315e-02	-9.653926e-03	5.572005e-02
## 2222	0	136	-2.225910e-02	3.347787e-02	-1.012383e-03	4.442261e-03

## 2223	1	105	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2224	0	100	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2225	1	136	-1.527680e-02	-9.289608e-03	-1.961697e-02	2.539754e-03
## 2226	1	129	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2227	0	111	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2228	1	124	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2229	0	136	-2.382718e-02	4.360501e-02	-6.115543e-03	2.443750e-03
## 2230	1	78	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 2231	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2232	1	135	-2.386832e-02	-1.420515e-02	3.009840e-02	-5.089763e-02
## 2233	1	121	-5.661694e-02	-4.243894e-02	-6.552210e-02	-1.689947e-02
## 2234	1	156	-4.180873e-02	-2.103104e-02	2.188724e-02	-2.796944e-02
## 2235	0	82	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2236	0	99	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2237	1	100	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2238	1	100	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2239	0	37	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2240	0	141	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2241	0	140	-7.732455e-03	2.772014e-03	1.283778e-02	1.861186e-03
## 2242	0	126	-1.410425e-02	9.098316e-03	1.310198e-02	1.942697e-02
## 2243	0	80	-1.132302e-02	3.252371e-03	1.102395e-02	1.052538e-02
## 2244	0	31	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2245	0	129	-7.152914e-03	2.509737e-03	6.131148e-03	4.695157e-03
## 2246	0	148	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 2247	0	136	-1.135669e-02	1.061733e-02	3.116799e-03	1.133900e-03
## 2248	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2249	1	117	-2.289660e-02	-1.550274e-02	-1.952978e-02	2.863893e-02
## 2250	0	122	-1.273884e-02	2.749454e-02	-7.960688e-03	-1.245700e-02
## 2251	1	82	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2252	0	125	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2253	0	139	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2254	1	151	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 2255	1	145	-2.919844e-02	-1.657706e-02	1.027206e-02	-9.168822e-04
## 2256	0	82	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2257	0	89	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 2258	1	100	-2.224476e-02	-5.822904e-03	-2.067509e-02	3.135950e-03
## 2259	1	120	-2.222724e-02	-1.153518e-02	1.715756e-02	2.689385e-02
## 2260	0	159	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2261	1	64	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2262	0	137	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 2263	1	96	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 2264	1	134	-2.772586e-02	-1.597974e-03	3.233201e-02	-2.144790e-02
## 2265	1	91	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2266	0	90	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 2267	1	140	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2268	0	141	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2269	0	70	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2270	0	136	-3.305830e-02	4.444341e-02	-4.613986e-03	-1.635232e-03
## 2271	0	103	-1.261029e-02	-4.453981e-03	1.161518e-02	-2.705256e-02
## 2272	1	71	-1.699422e-02	-1.048015e-02	2.693246e-02	-5.193022e-02
## 2273	1	100	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2274	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2275	1	155	-2.272530e-02	-2.512566e-03	3.176916e-02	1.105562e-02
## 2276	1	127	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02

## 2277	0	48	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2278	1	82	-1.661586e-02	5.002124e-03	1.596326e-02	3.433312e-02
## 2279	0	41	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2280	0	136	-3.831861e-02	6.929643e-02	-1.139090e-02	-6.168732e-03
## 2281	1	103	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2282	1	94	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2283	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2284	0	126	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2285	0	102	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2286	0	107	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2287	1	85	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2288	0	81	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2289	1	114	-1.766682e-02	-4.398437e-03	3.068414e-02	1.947095e-02
## 2290	0	67	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2291	0	132	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 2292	0	151	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2293	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2294	1	54	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2295	0	122	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2296	0	139	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2297	0	149	-2.125892e-02	-3.696388e-03	1.408541e-02	1.426536e-02
## 2298	0	78	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2299	0	136	-2.763893e-02	5.663542e-02	-1.053882e-02	6.324549e-03
## 2300	1	69	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2301	0	136	-2.977145e-02	5.630204e-02	-1.089129e-02	-1.275898e-02
## 2302	0	134	-7.732455e-03	2.772014e-03	1.283778e-02	1.861186e-03
## 2303	1	66	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2304	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2305	0	63	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2306	1	86	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2307	0	78	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 2308	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2309	0	152	-1.546504e-02	7.434558e-03	5.964019e-03	1.059859e-02
## 2310	0	69	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2311	0	129	-2.688545e-02	2.302798e-02	1.429210e-02	1.965942e-02
## 2312	1	135	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2313	0	137	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2314	0	146	-1.822909e-02	9.031358e-04	2.763177e-02	7.879825e-03
## 2315	1	137	-1.290730e-02	-5.931627e-03	1.563005e-02	2.415773e-02
## 2316	1	140	-1.649777e-02	-2.949115e-03	-2.386966e-02	1.135672e-04
## 2317	1	113	-2.386832e-02	-1.420515e-02	3.009840e-02	-5.089763e-02
## 2318	0	85	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2319	0	89	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 2320	1	48	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2321	0	138	-1.226517e-02	3.358123e-03	3.806052e-03	4.436629e-03
## 2322	0	156	-1.828326e-02	6.788898e-03	8.480469e-03	1.080372e-02
## 2323	1	123	-1.537593e-02	-4.355276e-03	2.576524e-02	1.167418e-02
## 2324	1	132	-9.489790e-03	-7.207941e-04	1.964285e-02	1.289433e-02
## 2325	1	69	-1.006933e-02	-4.585172e-04	2.634948e-02	1.006035e-02
## 2326	0	156	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2327	0	106	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2328	1	119	-2.640918e-02	-1.155876e-02	4.007713e-02	-5.684039e-02
## 2329	0	156	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2330	1	78	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02

## 2331	1	153	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2332	0	59	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2333	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2334	1	140	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2335	0	156	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2336	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 2337	1	149	-3.255749e-02	-2.085102e-02	4.412931e-03	2.799701e-02
## 2338	0	98	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2339	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2340	0	119	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2341	0	106	-2.135089e-02	-7.705478e-03	1.079340e-02	5.942284e-03
## 2342	1	139	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2343	1	135	-1.175294e-02	-5.469094e-03	2.688814e-02	-1.416197e-02
## 2344	1	135	-1.443285e-02	-6.801268e-03	1.258951e-02	3.101204e-02
## 2345	1	148	-3.262049e-02	-2.284697e-02	-1.299715e-03	-1.085360e-02
## 2346	0	32	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2347	1	153	-2.122989e-02	-7.656486e-03	2.556244e-02	2.686772e-02
## 2348	0	154	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2349	1	103	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2350	1	151	-2.787576e-02	2.664928e-03	4.451116e-02	1.911609e-02
## 2351	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 2352	1	80	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2353	0	155	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2354	1	151	-3.699513e-02	-2.826699e-02	-2.502352e-02	-1.777139e-04
## 2355	1	101	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 2356	1	57	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 2357	1	116	-1.944056e-02	4.513014e-03	1.982306e-02	1.235545e-02
## 2358	0	110	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2359	1	133	-1.186622e-02	3.997213e-03	4.363830e-03	3.133687e-02
## 2360	0	119	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2361	0	149	-1.297395e-02	-2.995636e-03	9.056488e-03	4.456232e-03
## 2362	1	89	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 2363	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 2364	1	54	-2.563209e-02	-6.621530e-03	5.030771e-02	1.818733e-02
## 2365	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2366	0	68	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2367	1	41	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2368	1	140	-5.718621e-02	-3.780897e-02	-4.090481e-02	-7.593043e-03
## 2369	1	128	-5.987238e-02	-4.752139e-02	-5.605708e-02	-1.649093e-02
## 2370	0	68	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 2371	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2372	1	78	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2373	1	64	-1.585623e-02	6.027989e-04	2.973853e-02	2.063894e-02
## 2374	0	136	-2.043321e-02	-7.831962e-04	-4.607448e-03	3.034556e-02
## 2375	1	62	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2376	1	119	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2377	0	35	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2378	1	63	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2379	1	81	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2380	0	140	-1.400552e-02	1.179102e-02	8.848476e-03	1.081360e-02
## 2381	0	45	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2382	1	115	-1.804166e-02	-9.109528e-03	2.896169e-02	-9.639596e-03
## 2383	0	131	-1.465878e-02	-3.635167e-03	1.345868e-03	4.880886e-03
## 2384	0	58	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03

## 2385	1	139	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2386	0	152	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2387	0	121	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2388	0	141	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2389	1	59	-1.749883e-02	-7.182929e-03	2.985093e-02	6.311384e-03
## 2390	0	137	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2391	0	67	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2392	0	131	-1.112043e-02	2.809547e-03	1.912792e-02	4.526503e-03
## 2393	1	146	-3.793090e-02	-1.481487e-02	2.252764e-02	-5.129851e-02
## 2394	0	157	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2395	0	96	-1.514710e-02	3.281056e-02	-8.558917e-03	-7.917889e-03
## 2396	1	156	-2.135710e-02	-8.795958e-03	1.640298e-02	3.664291e-02
## 2397	0	69	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2398	0	136	-2.916702e-02	4.993552e-02	-6.541581e-03	-3.802890e-03
## 2399	0	66	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2400	1	93	-1.275781e-02	2.824063e-03	1.719574e-02	-2.260869e-02
## 2401	1	79	-2.425179e-02	-2.923514e-03	2.358486e-02	-1.656392e-02
## 2402	1	132	-1.786857e-02	-7.397065e-03	1.533936e-02	1.604779e-02
## 2403	1	140	-9.705889e-03	-2.673458e-03	2.508256e-02	1.891486e-02
## 2404	0	136	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2405	1	129	-2.949151e-02	-2.046936e-02	-1.284849e-02	5.269767e-02
## 2406	1	122	-2.612865e-02	-1.420828e-02	5.019950e-02	-4.853657e-02
## 2407	1	151	-2.651714e-02	-1.530491e-02	1.347442e-02	-1.647060e-02
## 2408	1	125	-2.450655e-02	-7.672576e-03	3.781714e-02	2.357625e-02
## 2409	0	123	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2410	0	126	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 2411	0	78	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2412	1	100	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2413	0	73	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2414	1	138	-3.811057e-02	-2.419445e-02	6.404526e-03	3.406797e-02
## 2415	1	152	-2.890345e-02	-4.120834e-03	3.147800e-02	-1.222184e-02
## 2416	1	137	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2417	0	84	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 2418	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2419	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 2420	0	103	-8.911789e-03	-7.613785e-04	-1.848694e-03	1.858504e-03
## 2421	0	109	-9.758753e-03	1.842170e-03	1.381863e-02	4.195563e-03
## 2422	1	132	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2423	1	57	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2424	1	45	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2425	0	130	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2426	0	133	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2427	1	151	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2428	0	40	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 2429	0	97	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2430	1	101	-1.997703e-02	-8.713044e-03	2.817080e-02	-5.306529e-02
## 2431	0	103	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2432	1	94	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2433	1	80	-1.743312e-02	-3.013623e-03	2.804029e-02	1.783110e-02
## 2434	1	133	-4.282860e-02	-1.742728e-02	-4.052114e-02	9.354423e-03
## 2435	1	136	-2.112651e-02	-1.709939e-02	-7.688838e-03	-1.689836e-02
## 2436	0	101	-2.833435e-02	2.759495e-02	3.420027e-03	9.009950e-03
## 2437	0	136	-2.377595e-02	4.285239e-02	-7.181695e-03	-7.206931e-03
## 2438	0	140	-9.718050e-03	1.030835e-02	2.769457e-03	7.576207e-03

## 2439	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 2440	0	157	-1.452169e-02	3.765827e-03	1.269202e-02	1.530611e-02
## 2441	1	146	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2442	1	130	-1.609654e-02	-5.365748e-03	2.098853e-02	-2.412542e-02
## 2443	1	63	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2444	1	65	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2445	1	103	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 2446	1	119	-1.086135e-02	-4.295944e-03	1.405623e-02	3.978359e-02
## 2447	0	124	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2448	1	94	-2.284659e-02	-1.048509e-02	2.795416e-02	4.207945e-02
## 2449	1	152	-1.697036e-02	-8.477803e-03	1.985280e-02	2.249810e-02
## 2450	1	100	-1.922289e-02	-1.350903e-02	3.383613e-04	7.880999e-03
## 2451	1	131	-1.609654e-02	-5.365748e-03	2.098853e-02	-2.412542e-02
## 2452	1	117	-2.602330e-02	-8.248342e-03	3.039547e-02	3.789580e-02
## 2453	1	119	-1.959115e-02	-5.402629e-03	1.848914e-02	4.167090e-02
## 2454	1	108	-1.909624e-02	-9.684706e-03	1.008422e-02	3.198780e-02
## 2455	0	73	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2456	1	117	-3.063482e-02	-1.821515e-02	2.403384e-02	-6.626773e-03
## 2457	0	135	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2458	1	140	-2.545752e-02	-5.280126e-03	4.228651e-02	-2.881869e-02
## 2459	0	157	-1.395628e-02	3.563679e-03	6.351125e-03	6.631552e-03
## 2460	1	89	-2.433992e-02	1.829019e-02	1.133626e-02	4.158991e-02
## 2461	0	136	-4.054663e-02	6.332517e-02	3.151023e-03	3.279293e-03
## 2462	1	143	-2.572150e-02	-1.250757e-02	1.509027e-02	6.675392e-02
## 2463	1	100	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 2464	0	90	-2.758770e-02	5.588280e-02	-1.160498e-02	-3.326133e-03
## 2465	1	115	-1.069026e-02	-5.547407e-03	1.895106e-02	-1.085884e-02
## 2466	1	120	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2467	1	104	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 2468	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2469	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2470	1	121	-1.829837e-02	1.151500e-03	1.627016e-02	2.756177e-02
## 2471	1	69	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2472	0	136	-2.842787e-02	5.107167e-02	-7.100045e-03	3.211489e-03
## 2473	1	139	-1.546040e-02	6.624610e-03	2.698959e-02	1.346440e-02
## 2474	1	126	-2.133530e-02	-1.129754e-02	4.757753e-03	5.490315e-02
## 2475	0	136	-3.594023e-02	7.389585e-02	-1.697895e-02	-1.398975e-02
## 2476	1	92	-1.309386e-02	-2.635925e-03	3.137270e-02	2.158018e-02
## 2477	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2478	1	74	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2479	0	100	-1.347944e-02	-1.017746e-04	1.603234e-02	4.883569e-03
## 2480	0	138	-7.732455e-03	2.772014e-03	1.283778e-02	1.861186e-03
## 2481	1	157	-1.297031e-02	-7.927574e-03	9.917403e-03	-1.469288e-02
## 2482	1	125	-3.046462e-02	-1.895528e-02	-1.072626e-03	3.650147e-02
## 2483	1	139	-2.012455e-02	-1.435000e-03	3.375136e-02	-4.862142e-02
## 2484	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2485	1	133	-3.013276e-02	-1.562877e-02	2.177972e-02	-3.398540e-02
## 2486	0	145	-1.305678e-02	2.118535e-03	6.562248e-03	6.059479e-03
## 2487	0	126	-1.452169e-02	3.765827e-03	1.269202e-02	1.530611e-02
## 2488	1	122	-6.624442e-02	-4.866002e-02	-5.514527e-02	-4.281696e-02
## 2489	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2490	1	102	-5.746990e-03	-2.873789e-03	3.194562e-03	3.022383e-03
## 2491	0	131	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 2492	0	78	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03

## 2493	1	113	-2.756401e-02	-1.230848e-02	3.233495e-02	-3.927176e-02
## 2494	0	46	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2495	1	123	-4.221635e-02	-1.964871e-02	-1.000977e-02	2.072575e-02
## 2496	1	157	-1.997847e-02	-5.098595e-03	1.609591e-02	1.194498e-02
## 2497	1	75	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2498	1	136	-3.732256e-02	-2.036039e-02	5.763165e-03	7.988368e-02
## 2499	0	137	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2500	0	130	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2501	0	101	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2502	1	138	-1.175294e-02	-5.469094e-03	2.688814e-02	-1.416197e-02
## 2503	1	106	-1.261439e-02	2.029342e-03	7.362955e-03	-1.431122e-02
## 2504	0	96	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2505	1	51	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2506	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2507	1	110	-3.664131e-02	-2.778691e-02	-4.992379e-02	2.136358e-02
## 2508	0	136	-2.382718e-02	4.360501e-02	-6.115543e-03	2.443750e-03
## 2509	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2510	1	144	-1.730493e-02	-7.652569e-03	2.864797e-02	9.359958e-03
## 2511	0	123	-1.171261e-02	6.604189e-04	5.671247e-03	7.522423e-04
## 2512	1	124	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2513	0	116	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2514	1	118	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 2515	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 2516	1	92	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2517	1	145	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2518	1	115	-2.867138e-02	-8.781181e-03	4.609219e-02	-2.217586e-02
## 2519	1	138	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2520	1	109	-3.587975e-02	-1.850256e-02	2.497428e-02	-3.096302e-02
## 2521	1	121	-4.555310e-02	-2.854829e-02	-5.177249e-02	2.322208e-02
## 2522	0	132	-3.056007e-02	-1.703913e-02	1.022424e-02	-3.802712e-02
## 2523	1	72	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2524	1	98	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2525	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 2526	1	128	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2527	1	138	-3.054147e-02	-1.817800e-02	5.455837e-03	-2.180853e-02
## 2528	0	109	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2529	1	99	-1.934109e-02	-6.122937e-03	1.744589e-02	-1.316264e-02
## 2530	1	95	-1.646629e-02	-7.848654e-03	1.154186e-02	3.352413e-02
## 2531	0	129	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2532	1	79	-1.729716e-02	-3.826438e-03	1.929827e-02	-3.608733e-03
## 2533	0	129	-1.216267e-02	6.677149e-03	1.578760e-02	1.494904e-02
## 2534	1	99	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2535	0	136	-3.952748e-02	8.202947e-02	-2.009032e-02	-2.408091e-02
## 2536	1	142	-3.075688e-02	-2.495164e-02	-3.572689e-02	5.488095e-04
## 2537	0	149	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2538	1	122	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2539	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2540	1	51	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2541	1	134	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2542	1	86	-2.476397e-02	-1.780818e-02	-4.971949e-02	-6.741819e-03
## 2543	0	136	-1.061755e-02	1.175349e-02	2.558335e-03	8.148280e-03
## 2544	0	136	-2.382718e-02	4.360501e-02	-6.115543e-03	2.443750e-03
## 2545	1	153	-6.536569e-02	-4.803125e-02	-1.462673e-02	6.796925e-03
## 2546	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 2547	1	73	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 2548	1	150	-1.796913e-02	-8.833491e-03	1.011284e-02	3.397759e-02
## 2549	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2550	0	102	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2551	1	86	-2.472526e-02	-1.123114e-02	4.110532e-02	-6.152240e-02
## 2552	1	125	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2553	1	83	-1.956953e-02	-1.397043e-02	1.197012e-02	-4.000967e-02
## 2554	0	106	-1.738854e-02	1.885059e-02	-3.761561e-04	-6.836365e-04
## 2555	1	140	-3.038310e-02	-2.164251e-02	-1.657969e-05	-1.247887e-03
## 2556	0	136	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 2557	1	40	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 2558	1	105	-9.563837e-03	-3.352379e-03	1.937362e-02	9.633017e-03
## 2559	0	49	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2560	0	130	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2561	0	112	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2562	0	136	-2.678864e-02	5.453494e-02	-1.212963e-02	-1.162391e-02
## 2563	0	153	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2564	0	95	-2.377595e-02	4.285239e-02	-7.181695e-03	-7.206931e-03
## 2565	0	124	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2566	0	127	-1.297395e-02	-2.995636e-03	9.056488e-03	4.456232e-03
## 2567	1	60	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 2568	0	88	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2569	1	95	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2570	1	139	-4.386201e-03	-1.210030e-03	1.033252e-02	1.185077e-02
## 2571	1	69	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2572	1	132	-2.961531e-02	-1.707894e-02	3.329296e-02	-4.787525e-02
## 2573	0	136	-3.353197e-02	6.857982e-02	-1.638073e-02	-1.852886e-02
## 2574	1	99	-1.110670e-02	-1.003224e-02	-2.450977e-02	-3.290473e-03
## 2575	0	90	-1.112043e-02	2.809547e-03	1.912792e-02	4.526503e-03
## 2576	1	91	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2577	0	123	-7.292065e-03	1.749044e-03	9.058981e-03	4.526262e-04
## 2578	1	152	-2.328584e-02	-1.575174e-02	-9.408876e-03	-4.043188e-03
## 2579	1	48	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2580	0	136	-2.084437e-02	4.183791e-02	-7.353885e-03	3.578820e-03
## 2581	1	152	-3.795400e-02	-1.247483e-02	6.912669e-02	-1.649800e-02
## 2582	0	75	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2583	0	136	-5.092273e-02	1.042936e-01	-2.425976e-02	-2.056744e-02
## 2584	0	89	-1.979679e-02	2.416661e-02	-9.743850e-04	3.855474e-03
## 2585	0	110	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2586	1	81	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 2587	0	136	-2.618421e-02	4.816842e-02	-7.779924e-03	-2.667820e-03
## 2588	1	159	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 2589	1	131	-2.616736e-02	-2.078531e-02	-4.062531e-02	6.244017e-03
## 2590	0	156	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2591	0	51	-2.189043e-02	4.685545e-02	-1.281001e-02	-1.482284e-02
## 2592	0	136	-1.927628e-02	3.171076e-02	-2.250725e-03	5.577331e-03
## 2593	1	98	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03
## 2594	0	87	-5.965624e-03	3.534208e-03	2.476685e-03	-2.270140e-03
## 2595	1	95	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2596	0	114	-8.603244e-03	6.984373e-03	7.089512e-03	1.012320e-02
## 2597	1	139	-1.404949e-02	-2.570113e-03	1.918294e-02	8.951411e-03
## 2598	1	123	-1.892468e-02	-9.037844e-03	4.200903e-02	-1.967516e-02
## 2599	1	37	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2600	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03

## 2601	1	123	-1.268870e-02	-9.063541e-04	2.632090e-02	1.777979e-02
## 2602	0	81	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2603	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2604	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2605	1	50	-2.178116e-02	-1.957528e-02	-5.095783e-02	-5.606748e-03
## 2606	0	66	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2607	1	57	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2608	1	140	-1.645775e-02	2.745910e-03	1.858472e-02	1.349052e-02
## 2609	1	136	-1.720474e-02	2.541958e-03	2.806233e-02	1.973181e-02
## 2610	1	101	-1.694901e-02	2.304347e-03	2.609352e-02	9.741616e-03
## 2611	1	136	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 2612	1	155	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2613	0	137	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2614	0	40	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2615	1	156	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02
## 2616	1	97	-1.709270e-02	8.667577e-03	6.282051e-03	3.608110e-02
## 2617	0	136	-1.450423e-02	1.745286e-03	-1.520412e-03	2.735198e-02
## 2618	0	143	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2619	1	80	-1.866078e-02	1.879472e-02	1.178891e-03	3.408259e-02
## 2620	0	61	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2621	0	141	-1.113806e-02	4.209338e-03	3.834675e-03	6.426423e-03
## 2622	1	64	-1.067446e-02	-9.543041e-03	-2.644806e-02	-2.316275e-03
## 2623	1	155	-2.116294e-02	-1.292409e-02	-1.349457e-02	1.319606e-03
## 2624	0	104	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03
## 2625	0	126	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2626	1	97	-2.640918e-02	-1.155876e-02	4.007713e-02	-5.684039e-02
## 2627	1	148	-3.523850e-02	-2.334315e-02	-9.653926e-03	5.572005e-02
## 2628	0	45	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2629	1	136	-3.004123e-02	-1.756478e-02	2.257721e-02	1.595667e-02
## 2630	1	158	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2631	1	152	-1.744862e-02	-1.289339e-03	8.836499e-03	3.569945e-02
## 2632	0	133	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2633	0	151	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 2634	0	67	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2635	1	71	-3.194999e-02	-1.276192e-02	4.649308e-02	-6.778430e-02
## 2636	0	107	-1.209597e-02	-3.570737e-03	-9.221828e-04	2.281287e-02
## 2637	1	112	-1.153684e-02	-3.516430e-03	2.144843e-02	-2.018250e-02
## 2638	0	96	-8.373883e-03	8.850231e-03	1.878456e-03	2.268971e-03
## 2639	1	61	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2640	1	131	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 2641	0	85	-1.511721e-02	2.289512e-02	-2.372634e-03	-4.635982e-03
## 2642	1	133	-2.103981e-02	-8.039366e-03	3.674502e-02	-3.800664e-02
## 2643	1	89	-5.168658e-02	-3.413852e-02	2.535399e-03	-5.492548e-02
## 2644	1	138	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2645	0	126	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2646	1	140	-4.725544e-02	-2.638353e-02	4.577874e-02	-3.778845e-02
## 2647	0	107	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2648	0	158	-1.764955e-02	6.408589e-04	2.092514e-02	1.071380e-02
## 2649	1	156	-2.497995e-02	-3.135639e-03	2.411402e-02	8.346517e-03
## 2650	0	41	7.230801e-21	4.453658e-20	-1.736270e-19	-5.616240e-20
## 2651	1	100	-3.187233e-02	-2.087910e-02	-4.298839e-03	3.479449e-02
## 2652	0	111	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2653	0	108	-1.194198e-02	-1.205439e-03	1.088230e-02	8.606468e-03
## 2654	0	114	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03

## 2655	1	126	-1.443285e-02	-6.801268e-03	1.258951e-02	3.101204e-02
## 2656	0	138	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2657	0	102	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2658	0	127	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2659	0	68	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2660	1	138	-6.005437e-02	-4.717609e-02	-6.233868e-02	-1.651973e-02
## 2661	1	68	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2662	1	135	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2663	0	150	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2664	1	147	-3.567494e-02	-1.196502e-02	4.515448e-03	8.359533e-02
## 2665	1	105	-1.162485e-02	-6.960757e-03	2.360035e-02	-3.309647e-02
## 2666	0	117	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2667	0	136	-2.079314e-02	4.108529e-02	-8.420037e-03	-6.071861e-03
## 2668	1	110	-1.606553e-02	-2.459914e-03	-2.580794e-02	1.087766e-03
## 2669	1	139	-3.164649e-02	-2.035732e-02	-8.879366e-04	-3.621269e-02
## 2670	1	106	-2.416823e-02	-9.232761e-03	3.706858e-02	-2.071499e-02
## 2671	1	152	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03
## 2672	1	74	-1.149398e-02	-5.747578e-03	6.389123e-03	6.044765e-03
## 2673	1	103	-1.295030e-02	-6.171827e-03	7.447432e-03	5.586565e-02
## 2674	1	127	-1.513546e-02	-4.752651e-03	3.551372e-02	1.216869e-02
## 2675	1	127	-2.686905e-02	1.858598e-02	2.428374e-02	-1.346981e-03
## 2676	0	98	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2677	0	141	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2678	1	102	-1.904390e-02	-2.560096e-03	3.571535e-02	3.741627e-03
## 2679	0	128	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2680	0	136	-2.225910e-02	3.347787e-02	-1.012383e-03	4.442261e-03
## 2681	0	136	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2682	1	136	-2.798069e-02	-1.631360e-02	5.057035e-02	-6.111385e-02
## 2683	1	123	-1.473465e-02	-2.542037e-03	2.789472e-02	2.153931e-03
## 2684	1	64	-1.609654e-02	-5.365748e-03	2.098853e-02	-2.412542e-02
## 2685	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03
## 2686	1	133	-2.033705e-02	-1.218664e-02	2.647303e-02	-4.070561e-02
## 2687	1	130	-1.379889e-02	-7.104776e-03	2.846196e-02	-2.978783e-02
## 2688	0	150	-1.171261e-02	6.604189e-04	5.671247e-03	7.522423e-04
## 2689	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 2690	1	89	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2691	1	154	-2.380399e-02	-1.268026e-02	3.870124e-02	-3.384919e-02
## 2692	1	130	-2.798378e-02	-1.511675e-02	2.148651e-02	-3.161052e-02
## 2693	1	148	-1.935198e-02	-1.044820e-02	3.045355e-02	-2.371687e-02
## 2694	1	136	-2.292320e-02	-1.300863e-02	2.384542e-02	-4.893665e-02
## 2695	0	134	-6.370782e-03	1.804637e-03	7.528484e-03	1.530246e-03
## 2696	0	142	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2697	0	140	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03
## 2698	1	71	-8.502258e-03	-4.590645e-03	1.166831e-02	-4.514822e-03
## 2699	0	77	-1.213440e-02	2.112801e-02	-3.610977e-03	-3.500912e-03
## 2700	1	79	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03
## 2701	1	157	-2.553461e-02	-1.775467e-02	-2.541402e-02	2.465405e-02
## 2702	1	89	-7.223316e-03	-5.053785e-03	6.722841e-03	-1.771526e-02
## 2703	0	74	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2704	0	140	-1.775483e-02	2.634528e-02	2.240192e-03	7.757354e-03
## 2705	1	115	-2.174173e-02	7.112996e-03	2.194194e-02	-1.610767e-02
## 2706	0	158	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2707	1	150	-2.256066e-02	-1.008479e-02	2.433373e-02	1.613125e-02
## 2708	0	138	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03

## 2709	1	137	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2710	1	137	-2.325685e-02	-8.423586e-03	3.342402e-02	-2.990074e-03
## 2711	0	136	-1.703262e-02	2.880750e-02	-2.930604e-03	-3.019784e-04
## 2712	0	129	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2713	1	124	-1.879771e-02	-5.088213e-03	3.211747e-02	4.943021e-04
## 2714	0	53	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2715	1	138	-1.401514e-02	-2.691517e-03	3.290320e-02	2.050256e-02
## 2716	1	156	-3.928507e-02	-2.388270e-02	3.366812e-03	4.392860e-02
## 2717	0	155	-1.560390e-02	-4.831689e-03	7.598842e-03	2.919901e-03
## 2718	1	141	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 2719	0	136	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2720	0	131	-1.164155e-02	2.172438e-02	-3.570718e-03	-3.706019e-03
## 2721	0	138	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2722	1	79	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02
## 2723	0	74	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2724	1	110	-3.962412e-02	-2.601981e-02	-4.868545e-02	2.022851e-02
## 2725	1	121	-2.644080e-02	-1.295026e-02	2.799187e-02	-9.559720e-03
## 2726	1	158	-1.678104e-02	-5.500417e-03	2.281957e-02	1.269274e-03
## 2727	1	108	-8.703314e-03	-1.906938e-03	2.360738e-02	1.594379e-02
## 2728	0	156	-1.858671e-02	-3.064585e-03	8.837185e-03	1.784831e-03
## 2729	1	89	-2.019727e-02	-8.049421e-03	1.577933e-02	-1.325903e-02
## 2730	1	73	-1.420760e-02	-3.138994e-04	1.656149e-02	2.979401e-02
## 2731	1	135	-1.217914e-02	-5.719502e-03	1.510089e-02	-7.527146e-04
## 2732	0	143	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2733	1	106	-2.019729e-02	-7.654516e-03	2.999651e-02	2.198855e-02
## 2734	0	94	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2735	1	149	-2.260068e-02	-1.577982e-02	-1.812065e-02	2.754292e-03
## 2736	1	134	-1.244077e-02	4.482941e-04	6.200401e-03	2.566268e-02
## 2737	0	136	-1.462436e-02	2.349148e-02	-2.332375e-03	-4.841089e-03
## 2738	1	127	-1.520495e-02	-4.192599e-03	8.156620e-03	2.982014e-02
## 2739	0	135	-7.226962e-03	-1.218475e-04	5.861927e-03	1.433849e-03
## 2740	0	87	-3.054916e-02	6.681272e-02	-1.761907e-02	-1.739379e-02
## 2741	1	120	-1.071076e-02	5.619699e-03	1.539015e-02	1.046814e-02
## 2742	1	119	-2.640918e-02	-1.155876e-02	4.007713e-02	-5.684039e-02
## 2743	1	155	-3.373970e-02	-2.318453e-02	-3.448854e-02	-5.862607e-04
## 2744	0	136	-1.404981e-02	2.704040e-02	-4.168947e-03	8.330918e-04
## 2745	1	66	-7.366741e-03	-4.259064e-03	1.655562e-02	-2.601273e-02
## 2746	1	121	-4.258109e-03	-2.701694e-03	7.044725e-03	-7.083742e-03
## 2747	1	93	-1.792998e-02	-5.917408e-03	2.636522e-02	-1.998846e-02
## 2748	0	31	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2749	0	114	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2750	1	123	-1.558831e-02	-8.423754e-03	1.563191e-03	5.188077e-02
## 2751	1	67	-1.086135e-02	-4.295944e-03	1.405623e-02	3.978359e-02
## 2752	1	125	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03
## 2753	1	153	-1.685369e-02	-1.290603e-02	-2.131521e-02	-2.680908e-04
## 2754	0	136	-2.819213e-02	6.224932e-02	-1.595469e-02	-1.228222e-02
## 2755	0	131	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2756	0	154	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2757	0	140	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03
## 2758	0	142	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03
## 2759	1	108	-1.106668e-02	-4.337216e-03	1.794460e-02	1.008648e-02
## 2760	0	87	-8.209290e-03	6.437467e-03	3.156564e-03	3.609169e-03
## 2761	0	127	-1.793262e-02	1.900685e-02	6.497370e-04	9.172152e-03
## 2762	1	155	-5.743357e-02	-3.701231e-02	5.729961e-03	-5.190310e-02

## 2763	1	147	-1.222214e-02	-5.959703e-03	6.918278e-03	3.095521e-02	
## 2764	1	128	-3.523850e-02	-2.334315e-02	-9.653926e-03	5.572005e-02	
## 2765	1	107	-1.175184e-02	-4.309141e-03	2.665637e-02	3.289001e-03	
## 2766	1	154	-1.445465e-02	-4.299684e-03	2.423474e-02	1.275180e-02	
## 2767	1	134	-2.472667e-02	-7.708134e-03	3.977024e-02	-5.006904e-02	
## 2768	0	124	-5.391071e-03	7.083127e-03	6.401137e-04	3.404041e-03	
## 2769	1	120	-2.039708e-02	3.563601e-04	2.379509e-02	4.611553e-02	
## 2770	0	112	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03	
## 2771	1	91	-3.523850e-02	-2.334315e-02	-9.653926e-03	5.572005e-02	
## 2772	1	111	-1.000510e-02	-5.575482e-03	1.023929e-02	-4.061359e-03	
## 2773	0	136	-1.462436e-02	2.349148e-02	-2.332375e-03	-4.841089e-03	
## 2774	1	104	-2.752815e-02	-2.244907e-02	-4.776327e-02	-2.584366e-03	
## 2775	0	93	-3.054916e-02	6.681272e-02	-1.761907e-02	-1.739379e-02	
## 2776	0	63	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03	
## 2777	1	150	-2.118689e-02	-7.416285e-03	3.374505e-02	-4.840200e-03	
## 2778	0	61	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03	
## 2779	1	131	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02	
## 2780	0	134	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03	
## 2781	0	103	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03	
## 2782	0	122	-7.309792e-03	4.992324e-03	3.367686e-03	3.037096e-03	
## 2783	1	71	-1.271340e-02	-6.401266e-03	1.442708e-02	2.720630e-02	
## 2784	1	126	-1.409873e-02	5.657232e-03	2.168030e-02	1.313346e-02	
## 2785	0	80	-3.054916e-02	6.681272e-02	-1.761907e-02	-1.739379e-02	
## 2786	1	128	-5.319688e-03	-1.463428e-03	1.475004e-02	7.064098e-03	
## 2787	1	152	-3.130032e-02	-2.301360e-02	-7.869527e-03	-3.569862e-02	
## 2788	1	124	-8.302500e-03	3.036763e-04	1.598838e-02	5.929028e-03	
## 2789	0	67	-2.982812e-03	1.767104e-03	1.238343e-03	-1.135070e-03	
## 2790	1	118	-2.576942e-02	-8.048393e-03	-1.004785e-02	3.215377e-02	
## 2791	0	153	-8.729802e-03	-1.106685e-03	4.432904e-03	1.887312e-03	
## 2792	1	138	-1.445465e-02	-4.299684e-03	2.423474e-02	1.275180e-02	
## 2793	1	139	-1.965019e-02	-1.491939e-02	-1.121712e-02	3.839283e-03	
## 2794	1	139	-2.612534e-02	-1.800531e-02	-7.493401e-03	3.177211e-02	
## 2795	0	136	-5.008256e-02	1.091048e-01	-2.876469e-02	-2.710506e-02	
## 2796	1	65	-6.475149e-03	-3.085914e-03	3.723716e-03	2.793282e-02	
## 2797	0	136	-2.320139e-02	4.640131e-02	-9.018266e-03	-1.532750e-03	
## 2798	0	130	-1.027488e-02	3.516148e-03	1.029732e-02	-6.824440e-04	
## 2799	1	157	-4.736032e-02	-3.702316e-02	-6.526198e-02	1.226108e-03	
## 2800	1	85	-1.786310e-02	-1.027611e-02	3.430371e-02	-3.382300e-02	
##			X5	X6	X7	X8	X9
## 1			-4.567421e-02	3.471738e-02	-1.562336e-02	-9.105898e-03	-4.611227e-03
## 2			2.368818e-02	4.402869e-03	-3.508276e-03	-4.222215e-03	-1.343155e-02
## 3			-1.250525e-02	-1.613854e-02	1.166346e-02	4.306609e-02	3.534799e-03
## 4			-1.149614e-03	5.310636e-03	2.144307e-02	-4.017268e-03	9.806726e-03
## 5			-3.443126e-02	-1.851469e-02	3.004893e-03	7.836796e-04	-4.032157e-02
## 6			-1.912345e-02	-1.591594e-03	3.744319e-03	-9.478906e-03	-7.961993e-03
## 7			1.212231e-03	1.654768e-02	-9.306971e-03	7.636988e-03	-7.429644e-03
## 8			4.139926e-02	3.428973e-02	-7.079608e-03	-1.442925e-04	1.905796e-02
## 9			-1.707236e-02	8.511417e-03	-7.935733e-03	4.915279e-03	3.553132e-03
## 10			-1.409443e-02	6.086495e-02	-1.680720e-02	1.148674e-02	-3.629206e-02
## 11			-1.311200e-02	2.989099e-02	-6.424906e-03	-1.350630e-02	-4.314061e-03
## 12			9.287605e-03	-3.103453e-02	8.183256e-03	-1.556548e-02	-7.390875e-04
## 13			2.081526e-02	-1.223744e-02	-4.027501e-04	-1.921565e-02	3.051196e-03
## 14			2.171854e-02	-1.565082e-02	-2.838953e-03	-1.018258e-02	1.291193e-03
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## 16 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 17 -3.267581e-02 2.157414e-02 -1.139153e-02 -1.447713e-02 2.732571e-02
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## 24 1.150419e-02 -3.461238e-03 -9.227683e-03 -6.030490e-02 -1.922492e-02
## 25 9.074244e-04 4.387926e-03 8.280276e-03 2.688526e-03 1.985631e-03
## 26 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
## 27 -1.038010e-02 -4.168454e-02 -1.424096e-01 2.020025e-02 4.262799e-02
## 28 -2.987475e-02 -6.582470e-02 1.847863e-02 -1.044927e-02 -7.591557e-03
## 29 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 30 2.042255e-03 3.587854e-02 -1.498588e-02 -1.451076e-02 -1.634583e-03
## 31 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 32 3.790781e-03 3.377094e-03 1.461429e-03 8.110846e-03 1.530968e-02
## 33 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 37 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 553  3.521787e-04  2.860750e-03  7.369295e-03 -5.367745e-05 -1.138520e-02
## 554  8.211060e-03  4.093115e-04  1.173646e-02  4.631620e-04  6.497444e-03
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## 713 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 715 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
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## 735 2.439087e-02 -1.202351e-02 -2.985408e-03 -4.557699e-03 1.049813e-02
## 736 -8.152462e-03 5.842927e-03 -1.124400e-03 5.492704e-03 -2.800043e-02
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## 738 4.226204e-03 7.504850e-03 -1.900795e-03 8.763809e-03 1.231113e-02
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## 840 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
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## 928 4.943760e-02 -1.166682e-02 -1.188687e-02 9.628034e-03 9.149586e-03
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## 932 1.553876e-03 3.877535e-03 -1.754340e-03 3.138924e-03 3.104195e-03
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## 1004 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
## 1005 -1.796065e-03 5.821026e-03 3.147769e-02 -4.467666e-03 8.688163e-03
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## 1089 4.006602e-03 1.149705e-02 3.852098e-02 4.883389e-03 4.232848e-03
## 1090 2.368818e-02 4.402869e-03 -3.508276e-03 -4.22215e-03 -1.343155e-02
## 1091 -5.673937e-02 2.119004e-02 -1.174037e-02 -2.821114e-02 4.776982e-02
## 1092 -1.448500e-02 1.281250e-02 -1.847917e-03 -1.690645e-02 2.987532e-02
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## 1094 -1.421795e-02 2.509009e-02 -9.050805e-03 -5.637251e-02 1.865804e-02
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## 1099 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1102 2.509350e-02 -1.309798e-02 9.669106e-04 -1.940251e-02 -9.886282e-03
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## 1107 2.528628e-02 -6.404795e-03 3.741828e-02 -1.457381e-02 -9.551908e-03
## 1108 4.052680e-02 -9.520086e-03 4.636507e-03 -2.137437e-02 -2.232951e-02
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## 1112 2.236906e-03 -5.004411e-04 3.215769e-03 4.971922e-03 1.220549e-02
## 1113 -6.350852e-03 -1.875240e-02 -5.004504e-02 -1.435156e-03 4.889531e-03
## 1114 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
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## 1118 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1119 -3.055723e-02 -1.387059e-02 -6.265197e-03 9.601166e-03 -1.662524e-02
## 1120 -4.891930e-02 -2.114933e-04 -1.232001e-02 -4.287204e-02 -4.217862e-02
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## 1137 -3.264717e-03 6.280057e-03 5.893023e-02 -1.567030e-02 1.978832e-02
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## 1148 -2.914518e-03 6.071247e-03 2.986981e-02 -6.953627e-03 2.585419e-03
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## 1157 3.223559e-02 4.865732e-02 -3.201806e-02 3.317414e-02 -6.919227e-02
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## 1159 -1.090765e-02 7.915552e-03 -1.369183e-02 -2.506623e-02 4.082093e-03
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## 1162 1.087931e-02 -1.526669e-03 7.851320e-03 3.038896e-02 1.106237e-02
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## 1165 3.693166e-02 -8.813264e-03 1.644065e-03 2.160616e-02 6.492435e-03
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## 1167 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1170 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1172 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1173 -2.081809e-02 2.155820e-02 6.751093e-05 -2.704396e-02 2.112763e-02
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## 1189 -1.348487e-02 -2.238201e-02 1.670536e-03 4.685887e-03 -2.017838e-02
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## 1267 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 1268 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1269 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1270 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1271 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
## 1272 -1.617738e-02 1.576221e-02 -9.684230e-03 2.614298e-02 2.249362e-02
## 1273 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1274 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1275 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1276 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1277 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1278 1.082290e-02 -1.728502e-03 8.441443e-04 3.431261e-02 3.056311e-03
## 1279 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1280 -3.197318e-02 2.923641e-02 -1.150193e-03 -4.132446e-02 3.005721e-02
## 1281 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1282 -1.939251e-02 7.744853e-03 -4.199832e-04 -7.632834e-04 -1.703900e-02
## 1283 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 1284 -1.796065e-03 5.821026e-03 3.147769e-02 -4.467666e-03 8.688163e-03
## 1285 9.329513e-03 1.590909e-04 1.334434e-02 2.949123e-03 1.260019e-02
## 1286 9.475141e-03 1.537348e-02 -4.202669e-03 1.012948e-02 -1.447475e-02
## 1287 -1.137726e-02 1.183082e-02 -1.164562e-02 1.373916e-03 1.296779e-02
## 1288 -9.824357e-04 3.097396e-02 -1.038229e-02 2.499304e-02 -3.197800e-02
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## 1290 2.304895e-02 -4.272279e-03 -7.949674e-03 1.169808e-02 1.723313e-02
## 1291 -1.299994e-02 -4.027279e-02 -1.555456e-01 1.416632e-02 -1.436010e-02
## 1292 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1293 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1294 -1.138679e-02 -1.638876e-02 1.327134e-02 4.555205e-02 9.637543e-03
## 1295 2.697822e-02 -1.645918e-02 -3.186616e-03 -1.437691e-02 1.370440e-02
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## 1297 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1298 -4.797603e-03 1.638867e-02 -5.037676e-03 -1.366769e-02 2.763897e-02
## 1299 -4.766104e-03 7.441584e-03 4.740209e-02 -1.921827e-02 -3.109703e-02
## 1300 -3.366499e-02 -2.162566e-02 -2.756518e-03 3.323318e-03 -2.283363e-02
## 1301 -1.802589e-03 2.596557e-02 -4.093519e-03 -9.383121e-03 -4.734483e-03
## 1302 4.352784e-03 2.198146e-02 -1.278786e-02 -3.757338e-02 -3.153523e-02
## 1303 5.670162e-03 2.292523e-05 4.166962e-03 5.603180e-03 5.732150e-03
## 1304 -5.262676e-03 -7.995552e-03 -1.256926e-03 -7.938878e-03 -2.153749e-02
## 1305 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1306 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 1307 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1308 8.211060e-03 4.093115e-04 1.173646e-02 4.631620e-04 6.497444e-03
## 1309 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
## 1310 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1314 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1315 -3.243728e-03 2.026620e-02 -6.792016e-03 -1.052877e-02 3.074316e-02
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## 1317 -1.741910e-03 2.750399e-04 1.331083e-03 1.349753e-02 -2.122605e-03
## 1318 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1319 8.012142e-03 3.280848e-02 1.622553e-03 5.035640e-02 -4.450632e-02
## 1320 -1.448501e-02 4.075752e-03 -8.136941e-03 -4.903932e-03 6.759404e-03
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## 1322 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 1323 -4.766104e-03 7.441584e-03 4.740209e-02 -1.921827e-02 -3.109703e-02
## 1324 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 1325 3.540180e-02 -1.790459e-02 -1.718007e-03 1.311846e-02 1.257285e-02
## 1326 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1327 -7.311508e-03 7.234969e-03 -1.692298e-03 3.281828e-02 8.512760e-03
## 1328 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1329 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1330 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1331 3.575434e-02 -9.413054e-03 -1.300781e-02 -1.367301e-02 -2.132074e-03
## 1332 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1333 3.302795e-02 -1.957625e-02 -5.075659e-04 -6.059406e-03 8.707709e-04
## 1334 7.351131e-04 1.949444e-03 1.728955e-02 1.008332e-03 3.339741e-02
## 1335 1.158649e-02 1.047379e-02 9.967626e-03 4.026067e-02 -2.051205e-02
## 1336 -1.247086e-02 6.497789e-04 -1.487573e-02 -2.641391e-02 -2.635181e-02
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## 1343 -4.298269e-03 -2.129252e-02 1.966123e-02 6.783016e-02 5.390232e-03
## 1344 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1345 4.183468e-02 3.841749e-02 -1.044183e-02 5.086705e-04 1.605941e-02
## 1346 -4.190219e-02 1.123829e-02 -2.523159e-03 -1.135837e-02 6.509302e-03
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## 1352 -3.831471e-02 -1.965514e-02 7.083111e-03 -1.158776e-02 -1.722221e-02
## 1353 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1355 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1356 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1365 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03

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## 1371 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 1372 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 1373 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1377 5.820376e-03 4.272013e-02 -1.443851e-02 2.949763e-02 -5.565969e-02
## 1378 1.734587e-02 -1.984099e-02 9.060135e-03 -2.081497e-03 -3.756597e-02
## 1379 -7.765557e-03 -1.820060e-02 -7.067873e-02 4.345161e-03 -1.953468e-02
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## 1381 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 1382 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1383 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1384 1.788545e-02 1.046488e-02 4.336562e-03 3.741363e-02 1.440818e-02
## 1385 3.302795e-02 -1.957625e-02 -5.075659e-04 -6.059406e-03 8.707709e-04
## 1386 -1.796065e-03 5.821026e-03 3.147769e-02 -4.467666e-03 8.688163e-03
## 1387 3.983076e-02 -7.830079e-03 -4.563780e-03 -1.554815e-03 -2.281092e-02
## 1388 -1.741910e-03 2.750399e-04 1.331083e-03 1.349753e-02 -2.122605e-03
## 1389 -3.831471e-02 -1.965514e-02 7.083111e-03 -1.158776e-02 -1.722221e-02
## 1390 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
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## 1392 -1.155812e-02 3.376853e-02 -8.179245e-03 -1.036737e-02 -1.209867e-03
## 1393 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1394 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1395 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1396 -1.540092e-02 6.526774e-02 -1.883834e-02 2.563723e-02 -4.141322e-02
## 1397 5.320437e-02 -3.075934e-03 -5.309029e-03 2.308766e-02 1.527466e-02
## 1398 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1400 -3.958204e-02 1.200486e-02 -1.003891e-02 -5.679809e-03 2.710144e-02
## 1401 3.521787e-04 2.860750e-03 7.369295e-03 -5.367745e-05 -1.138520e-02
## 1402 2.078448e-02 -1.932465e-02 3.152269e-03 6.083027e-03 -1.087109e-02
## 1403 2.083213e-03 2.762041e-02 -7.785732e-03 5.222018e-02 -2.315266e-02
## 1404 -2.148660e-02 5.159142e-03 -6.458195e-03 1.278792e-02 -7.776411e-03
## 1405 7.733729e-03 -3.491207e-02 9.937596e-03 -1.870441e-02 -3.843282e-03
## 1406 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1407 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1408 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1409 -6.776123e-04 5.570806e-03 3.308557e-02 -1.981704e-03 1.479091e-02
## 1410 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1411 6.036538e-03 1.485714e-02 1.705196e-03 1.964953e-03 -4.116963e-02
## 1412 3.312285e-02 -1.176629e-02 -1.383517e-02 -3.700718e-02 -5.229544e-02
## 1413 2.313439e-02 1.833351e-02 2.034687e-03 3.877930e-02 -1.237770e-02
## 1414 1.926595e-02 1.677276e-02 -4.688841e-03 6.631714e-05 7.194858e-03
## 1415 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1416 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1417 1.777112e-02 3.803339e-02 -1.079067e-02 -1.322534e-02 3.650352e-02
## 1418 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1419 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02

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## 1422 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 1423 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 1424 8.474996e-03 9.303342e-03 6.896830e-03 1.497594e-02 4.751624e-03
## 1425 5.288628e-02 5.196215e-02 -5.700421e-03 1.122539e-02 -1.518179e-02
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## 1427 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1429 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1430 3.414640e-02 -1.982647e-02 1.100318e-03 -3.573445e-03 6.973515e-03
## 1431 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
## 1432 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 1433 -2.193654e-02 2.180842e-02 -1.540373e-03 -2.952992e-02 1.502488e-02
## 1434 -1.331446e-02 1.888970e-02 1.207941e-02 -1.524516e-02 6.027418e-02
## 1435 -3.239316e-20 3.733586e-19 -1.293167e-20 1.190115e-19 -6.003336e-20
## 1436 5.259682e-03 -8.083507e-04 -3.476629e-04 -4.194326e-03 1.241321e-02
## 1437 3.936030e-02 3.380443e-02 -6.873152e-03 9.841194e-02 -1.641893e-02
## 1438 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 1439 3.679191e-03 4.260656e-02 -1.564531e-02 3.440981e-02 -2.266542e-02
## 1440 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1441 -1.634524e-02 -2.185675e-02 1.393735e-03 1.569745e-02 -2.840372e-02
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## 1443 3.929837e-02 6.551391e-02 -1.906978e-02 2.236278e-02 -1.902279e-02
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## 1445 4.271634e-03 1.561775e-02 1.013193e-02 -9.714061e-04 -4.839093e-02
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## 1489 3.608637e-03 -5.731703e-03 1.098151e-02 1.750426e-02 3.350551e-02
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## 1531 1.523713e-02 1.623772e-03 -6.333936e-04 2.643996e-02 1.438585e-02
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## 1625 5.045238e-03 -2.328756e-02 -5.681921e-02 1.201631e-02 3.093025e-02
## 1626 3.983387e-02 4.954197e-02 -1.540025e-02 3.485322e-02 3.863070e-02
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## 1628 6.036538e-03 1.485714e-02 1.705196e-03 1.964953e-03 -4.116963e-02
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## 1630 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1631 -3.264717e-03 6.280057e-03 5.893023e-02 -1.567030e-02 1.978832e-02
## 1632 3.148348e-02 -1.136398e-02 7.143164e-03 -6.580499e-03 1.089283e-02
## 1633 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 1634 2.404036e-02 7.263620e-03 3.861019e-03 -4.275892e-03 -2.481675e-02
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## 1637 -8.379238e-03 1.056412e-02 1.861803e-02 -1.859527e-02 -1.246631e-02
## 1638 -2.754400e-02 -4.239808e-02 1.508833e-02 4.461305e-02 -1.974777e-02
## 1639 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 1640 7.294864e-20 -8.343068e-19 4.468636e-21 -2.026057e-19 1.281786e-19
## 1641 2.710764e-02 -1.652396e-02 -5.771881e-03 -4.091248e-02 -4.299750e-02
## 1642 8.474996e-03 9.303342e-03 6.896830e-03 1.497594e-02 4.751624e-03
## 1643 2.036708e-03 1.918775e-02 4.334588e-02 -1.471368e-02 -5.477872e-02
## 1644 1.767673e-02 -2.707972e-02 6.660948e-03 -1.948216e-04 -1.707948e-02
## 1645 1.523713e-02 1.623772e-03 -6.333936e-04 2.643996e-02 1.438585e-02
## 1646 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
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## 1648 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1649 1.054313e-02 -8.144537e-04 8.092797e-03 1.583540e-03 -1.790836e-02
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## 1651 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1652 3.415172e-02 -1.329996e-02 3.258027e-03 2.334530e-02 1.545776e-02
## 1653 1.853566e-03 1.699224e-03 1.889743e-02 3.494293e-03 3.950016e-02
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## 1659 1.771208e-02 1.289523e-02 -2.934501e-03 -3.072607e-03 4.090663e-03
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## 1701 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1702 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1704 -6.061429e-03 2.630340e-03 -6.668332e-03 2.259143e-02 5.627854e-03
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## 1706 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 1707 -1.744774e-02 1.253019e-02 -1.179285e-02 -1.304095e-02 1.056569e-02
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## 1709 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
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## 1711 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1712 4.028080e-02 3.453995e-02 -8.687492e-03 -2.630254e-03 1.295521e-02
## 1713 3.469681e-02 -1.317751e-02 -1.069705e-02 -4.121950e-02 1.733756e-02
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## 1716 -6.464511e-04 5.103905e-04 1.003462e-02 -4.503978e-04 -1.118563e-03
## 1717 -3.264717e-03 6.280057e-03 5.893023e-02 -1.567030e-02 1.978832e-02
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## 1719 -3.422969e-02 1.769660e-02 -9.637195e-03 -1.761606e-02 2.422151e-02
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## 1721 7.351131e-04 1.949444e-03 1.728955e-02 1.008332e-03 3.339741e-02
## 1722 -1.119953e-02 -2.760267e-02 7.808880e-03 2.209550e-02 -3.159694e-02
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## 1732 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1733 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 1748 1.788545e-02 1.046488e-02 4.336562e-03 3.741363e-02 1.440818e-02
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## 1796 -1.926421e-02 2.543574e-02 -1.686829e-03 -2.390504e-02 2.423182e-02
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## 1802 8.402534e-03 1.179677e-02 -3.198829e-03 -6.075198e-03 1.895310e-02
## 1803 -1.595391e-02 8.261197e-03 -6.327849e-03 7.401240e-03 9.655877e-03
## 1804 2.697822e-02 -1.645918e-02 -3.186616e-03 -1.437691e-02 1.370440e-02
## 1805 -4.587456e-04 -1.790606e-02 6.611159e-03 3.578378e-02 5.887301e-06
## 1806 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1807 1.360173e-04 3.072373e-02 -8.774408e-03 2.747900e-02 -2.587526e-02
## 1808 4.116287e-03 -3.854610e-03 5.921302e-03 2.464256e-03 2.627956e-03
## 1809 -2.750961e-02 -2.560977e-02 -1.145086e-02 -2.486694e-02 -4.963438e-02
## 1810 2.448860e-03 1.112833e-02 -3.502837e-03 2.436662e-02 2.204468e-02
## 1811 5.403254e-02 2.232915e-02 5.837413e-03 -3.969662e-03 4.928992e-03
## 1812 3.929837e-02 6.551391e-02 -1.906978e-02 2.236278e-02 -1.902279e-02
## 1813 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1814 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1815 -1.482540e-02 -1.690510e-02 1.917921e-02 3.738752e-02 -1.705734e-02
## 1816 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1817 4.824107e-02 -1.273869e-02 3.975451e-03 2.572934e-02 6.072013e-03
## 1818 -1.299994e-02 -4.027279e-02 -1.555456e-01 1.416632e-02 -1.436010e-02
## 1819 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1820 2.787391e-02 -1.963493e-02 -1.153329e-02 -3.837285e-02 -2.550956e-02
## 1821 -3.179817e-03 -2.154274e-02 2.126912e-02 7.031613e-02 1.149298e-02
## 1822 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
## 1823 -1.029791e-03 2.710055e-03 2.571628e-02 -1.928027e-03 2.617610e-02
## 1824 -1.328212e-02 -3.568762e-02 1.329942e-02 -8.857305e-03 1.879521e-02
## 1825 2.304895e-02 -4.272279e-03 -7.949674e-03 1.169808e-02 1.723313e-02
## 1826 -4.570590e-02 -5.148960e-02 4.981776e-03 4.848576e-03 -4.959099e-02
## 1827 -1.636973e-02 1.617369e-02 2.305609e-03 -2.193205e-02 6.284636e-03
## 1828 4.271634e-03 1.561775e-02 1.013193e-02 -9.714061e-04 -4.839093e-02
## 1829 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1830 -2.250968e-02 3.493440e-03 -2.103175e-03 -1.059509e-02 2.354830e-02
## 1831 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1832 5.714398e-04 3.485149e-02 -1.213663e-02 2.813196e-02 -2.887381e-02
## 1833 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1834 -1.227777e-03 -1.057513e-02 -4.634590e-02 1.470455e-02 9.407421e-03
## 1835 3.303327e-02 -1.304974e-02 1.650143e-03 2.085934e-02 9.355015e-03
## 1836 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1837 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1838 5.983834e-03 -1.891486e-02 8.610576e-03 -8.790988e-03 2.599007e-02
## 1839 -4.543822e-21 5.145321e-20 9.245497e-22 9.126905e-21 -6.508155e-21
## 1840 -1.060952e-03 7.770470e-03 4.876724e-02 -3.459334e-03 4.208557e-02
## 1841 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 1842 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1843 7.921265e-03 1.149595e-02 -2.448330e-03 6.990552e-03 -1.757894e-02
## 1844 3.498807e-02 -6.302083e-03 -7.246404e-03 -1.621264e-02 -1.962001e-02
## 1845 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1846 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1847 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1848 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1849 3.687279e-02 -9.663274e-03 -1.139993e-02 -1.118705e-02 3.970670e-03
## 1850 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1851 -1.871790e-02 -1.012110e-02 -4.915972e-06 -9.634771e-03 1.045914e-02

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## 1852 6.590268e-03 1.266453e-02 1.105036e-02 9.950340e-03 -1.883906e-02
## 1853 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1854 -2.176521e-02 -2.834886e-02 1.991021e-02 2.638950e-02 2.587229e-02
## 1855 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1856 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
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## 1858 6.339168e-02 -1.441803e-03 -4.440533e-03 8.511698e-02 3.279220e-02
## 1859 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 1860 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1861 2.943713e-02 -1.236916e-02 -1.034938e-02 -3.702517e-02 4.924348e-03
## 1862 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 1863 8.436420e-03 -5.133844e-02 1.046046e-02 -1.903989e-02 2.008640e-02
## 1864 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 1865 3.107751e-03 7.755070e-03 -3.508679e-03 6.277848e-03 6.208389e-03
## 1866 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1867 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1868 4.028080e-02 3.453995e-02 -8.687492e-03 -2.630254e-03 1.295521e-02
## 1869 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1870 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 1871 -4.766104e-03 7.441584e-03 4.740209e-02 -1.921827e-02 -3.109703e-02
## 1872 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1873 -3.264717e-03 6.280057e-03 5.893023e-02 -1.567030e-02 1.978832e-02
## 1874 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1876 2.283699e-02 -1.590105e-02 -1.231068e-03 -7.696624e-03 7.393937e-03
## 1877 1.087931e-02 -1.526669e-03 7.851320e-03 3.038896e-02 1.106237e-02
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## 1884 -9.773028e-04 7.749117e-03 1.243380e-02 -2.337073e-03 -2.160505e-02
## 1885 -5.149444e-03 9.641249e-03 6.308375e-02 -2.069590e-02 -3.802367e-03
## 1886 2.857037e-02 -4.718130e-02 7.907319e-03 1.106911e-03 3.270333e-04
## 1887 6.590268e-03 1.266453e-02 1.105036e-02 9.950340e-03 -1.883906e-02
## 1888 3.521787e-04 2.860750e-03 7.369295e-03 -5.367745e-05 -1.138520e-02
## 1889 -1.448500e-02 1.281250e-02 -1.847917e-03 -1.690645e-02 2.987532e-02
## 1890 3.822014e-03 -4.834690e-04 2.332521e-02 1.960181e-03 -9.875804e-03
## 1891 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1892 -1.178159e-02 4.126954e-02 -1.153563e-02 8.374363e-03 1.162788e-02
## 1893 8.241805e-04 3.120920e-03 1.901179e-02 1.981886e-03 -6.401015e-03
## 1894 1.655827e-02 -2.682950e-02 5.053064e-03 -2.680783e-03 -2.318223e-02
## 1895 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1896 1.360173e-04 3.072373e-02 -8.774408e-03 2.747900e-02 -2.587526e-02
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## 1899 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1900 8.994578e-03 1.834522e-03 1.200485e-02 2.536336e-02 -1.252831e-02
## 1901 -4.766104e-03 7.441584e-03 4.740209e-02 -1.921827e-02 -3.109703e-02
## 1902 -1.783863e-02 1.162239e-02 -2.174323e-03 2.375641e-03 -1.393481e-02
## 1903 -3.248943e-02 1.266439e-02 8.966310e-05 -7.702608e-03 2.749614e-02
## 1904 -4.499265e-03 -2.012274e-02 -6.757733e-02 1.082949e-02 3.857198e-02
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## 1906 -3.887941e-02  1.966713e-02  2.024335e-04 -3.252714e-02  2.983294e-02
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## 1908 -1.060879e-02 -4.905194e-02  1.378979e-02 -1.038295e-02 -3.966985e-04
## 1909  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
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## 1914 -2.754400e-02 -4.239808e-02  1.508833e-02  4.461305e-02 -1.974777e-02
## 1915 -2.756471e-02 -4.820268e-02  2.336083e-02  4.981159e-02  3.206355e-02
## 1916 -1.783863e-02  1.162239e-02 -2.174323e-03  2.375641e-03 -1.393481e-02
## 1917 -7.662743e-04  3.110971e-03  5.761410e-03 -2.539639e-03 -1.748794e-02
## 1918  2.672328e-03  3.627315e-03 -1.464553e-04  5.624885e-03  9.206939e-03
## 1919  3.888294e-03  1.781742e-02  2.581359e-02 -2.449035e-03 -2.109627e-02
## 1920  2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02  1.291193e-03
## 1921 -7.662743e-04  3.110971e-03  5.761410e-03 -2.539639e-03 -1.748794e-02
## 1922  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
## 1923 -5.391541e-03  4.396842e-03  1.391134e-02  5.535568e-03 -3.293460e-02
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## 1926 -5.149444e-03  9.641249e-03  6.308375e-02 -2.069590e-02 -3.802367e-03
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## 1929 -1.762924e-03  3.830172e-03  4.485645e-02 -1.170671e-02 -1.403605e-03
## 1930  2.672328e-03  3.627315e-03 -1.464553e-04  5.624885e-03  9.206939e-03
## 1931  2.672328e-03  3.627315e-03 -1.464553e-04  5.624885e-03  9.206939e-03
## 1932 -2.279309e-02  9.561938e-03 -8.489337e-03  2.693841e-02 -1.289757e-02
## 1933  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
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## 1937 -1.862624e-02  4.633882e-03 -6.181394e-03  1.776355e-03  4.489378e-04
## 1938  1.553876e-03  3.877535e-03 -1.754340e-03  3.138924e-03  3.104195e-03
## 1939  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
## 1940  1.948362e-02 -1.208082e-02  3.037500e-02 -2.392486e-02 -5.096593e-03
## 1941  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
## 1942  2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02  1.291193e-03
## 1943 -3.297858e-03  8.270911e-03  4.555147e-02 -8.431256e-03  2.988009e-02
## 1944  4.559808e-02 -1.505328e-02  1.163205e-03  4.167442e-02  1.453393e-02
## 1945  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
## 1946 -1.081815e-02  1.621167e-02 -6.867170e-03 -9.089429e-02 -2.573629e-02
## 1947  3.521787e-04  2.860750e-03  7.369295e-03 -5.367745e-05 -1.138520e-02
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## 1949  4.028080e-02  3.453995e-02 -8.687492e-03 -2.630254e-03  1.295521e-02
## 1950 -2.602252e-03  7.383716e-02 -2.281669e-02  2.105949e-02 -4.746972e-02
## 1951 -1.796065e-03  5.821026e-03  3.147769e-02 -4.467666e-03  8.688163e-03
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## 1954  7.876013e-04  6.988506e-03  4.007071e-03  5.992856e-04 -1.438375e-02
## 1955 -1.481796e-19  1.723610e-18 -2.759298e-20  4.571364e-19 -2.707294e-19
## 1956  2.300704e-20 -2.655913e-19  8.077419e-21 -9.560210e-20  4.022125e-20
## 1957  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
## 1958 -7.662743e-04  3.110971e-03  5.761410e-03 -2.539639e-03 -1.748794e-02
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## 1960 2.218539e-02 2.384439e-02 9.928673e-03 -1.035276e-03 3.615922e-02
## 1961 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1962 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 1963 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 1964 8.866197e-05 2.459835e-03 2.732416e-02 5.579340e-04 3.227885e-02
## 1965 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1966 5.714398e-04 3.485149e-02 -1.213663e-02 2.813196e-02 -2.887381e-02
## 1967 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 1968 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 1969 7.921265e-03 1.149595e-02 -2.448330e-03 6.990552e-03 -1.757894e-02
## 1970 -1.983735e-02 7.120754e-03 -2.249631e-03 -4.970203e-03 3.275524e-02
## 1971 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1972 -1.029791e-03 2.710055e-03 2.571628e-02 -1.928027e-03 2.617610e-02
## 1973 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1974 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1975 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1976 -7.765557e-03 -1.820060e-02 -7.067873e-02 4.345161e-03 -1.953468e-02
## 1977 -2.881377e-03 4.080393e-03 4.324856e-02 -1.419267e-02 -7.506349e-03
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## 1979 7.317967e-03 -5.108822e-02 8.852580e-03 -2.152585e-02 1.398366e-02
## 1980 -2.003083e-03 6.435987e-03 -1.655146e-02 -1.153328e-02 2.319427e-04
## 1981 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 1982 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 1983 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
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## 1987 -1.783863e-02 1.162239e-02 -2.174323e-03 2.375641e-03 -1.393481e-02
## 1988 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 1989 -2.914518e-03 6.071247e-03 2.986981e-02 -6.953627e-03 2.585419e-03
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## 1993 -9.824357e-04 3.097396e-02 -1.038229e-02 2.499304e-02 -3.197800e-02
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## 1995 6.036538e-03 1.485714e-02 1.705196e-03 1.964953e-03 -4.116963e-02
## 1996 -3.510932e-02 -7.775820e-02 2.701190e-02 4.550152e-02 -2.649990e-02
## 1997 -7.939060e-03 5.688084e-02 -2.550154e-02 -1.670352e-02 -6.309281e-02
## 1998 -3.211111e-02 -1.774813e-02 -4.510857e-03 6.462242e-03 -1.972944e-02
## 1999 3.235658e-02 -8.655322e-03 -8.073756e-03 -3.954682e-02 -6.978338e-02
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## 2008 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 2009 -6.152215e-03 -4.455255e-03 4.738077e-03 -1.039874e-02 2.854588e-02
## 2010 8.039573e-03 5.175586e-03 1.025905e-02 1.432298e-02 7.750174e-03
## 2011 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2012 -2.902701e-03 -4.071915e-02 7.297375e-03 3.154712e-03 -2.583839e-02
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## 2016  2.130704e-02 -3.997239e-03 -6.618591e-03  2.519560e-02  1.511052e-02
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## 2024  2.226379e-02  1.316837e-02 -3.754231e-04  4.461247e-05  3.720069e-03
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## 2086 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
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## 2089 2.448860e-03 1.112833e-02 -3.502837e-03 2.436662e-02 2.204468e-02
## 2090 3.616539e-02 -5.702293e-03 7.405475e-03 1.906652e-02 -1.099551e-02
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## 2103 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 2156 3.693166e-02 -8.813264e-03 1.644065e-03 2.160616e-02 6.492435e-03
## 2157 2.555376e-02 -2.040149e-02 -4.017541e-03 -4.405141e-02 -4.610169e-02
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## 2163 2.467735e-02 4.760267e-02 -1.214329e-02 -2.202266e-02 3.672779e-02
## 2164 2.304895e-02 -4.272279e-03 -7.949674e-03 1.169808e-02 1.723313e-02
## 2165 -1.311200e-02 2.989099e-02 -6.424906e-03 -1.350630e-02 -4.314061e-03
## 2166 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 2167 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
## 2168 3.273115e-04 -1.240761e-02 -3.334244e-03 -1.829171e-02 3.094224e-02
## 2169 3.403863e-02 -2.023079e-02 -1.728938e-02 -6.835436e-02 -2.498059e-02
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## 2171 2.899237e-02 -1.988515e-02 -9.925407e-03 -3.588689e-02 -1.940681e-02
## 2172 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2173 7.351131e-04 1.949444e-03 1.728955e-02 1.008332e-03 3.339741e-02
## 2174 -7.706091e-03 -8.332790e-03 6.492417e-03 -1.353766e-02 2.544169e-02
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## 2179 -1.983735e-02 7.120754e-03 -2.249631e-03 -4.970203e-03 3.275524e-02
## 2180 -1.939251e-02 7.744853e-03 -4.199832e-04 -7.632834e-04 -1.703900e-02
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## 2182 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
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## 2187 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 2190 -1.155812e-02 3.376853e-02 -8.179245e-03 -1.036737e-02 -1.209867e-03
## 2191 3.492149e-02 2.900754e-02 -1.546775e-03 4.324266e-02 5.840443e-03
## 2192 -1.497919e-02 -4.440163e-02 1.460140e-02 6.542813e-02 -1.456886e-02
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## 2194 3.302795e-02 -1.957625e-02 -5.075659e-04 -6.059406e-03 8.707709e-04
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## 2196 8.348127e-03 2.344913e-03 2.203946e-02 2.491297e-02 -1.364688e-02
## 2197 1.087931e-02 -1.526669e-03 7.851320e-03 3.038896e-02 1.106237e-02
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## 2199 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2200 -2.656437e-02 -3.615461e-02 2.508125e-02 8.299325e-02 3.965403e-03
## 2201 -4.697915e-20 5.213670e-19 2.502950e-21 1.071648e-19 -7.100564e-20
## 2202 -3.528065e-02 -2.760092e-02 5.561310e-03 -1.041790e-02 -3.734731e-02
## 2203 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
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## 2210 4.116287e-03 -3.854610e-03 5.921302e-03 2.464256e-03 2.627956e-03
## 2211 2.168124e-02 -4.622366e-02 1.585096e-02 -1.066395e-02 -8.064785e-03
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## 2213 1.585108e-03 1.697211e-05 2.010944e-02 -3.011741e-03 -2.208129e-02
## 2214 -1.431790e-02 6.836596e-02 -2.016358e-02 3.022848e-02 -2.345432e-02
## 2215 1.054313e-02 -8.144537e-04 8.092797e-03 1.583540e-03 -1.790836e-02
## 2216 2.073275e-03 -1.401700e-02 3.205147e-03 -1.958723e-02 6.693092e-03
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## 2227 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2228 4.028080e-02 3.453995e-02 -8.687492e-03 -2.630254e-03 1.295521e-02
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## 2240 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
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## 2242 1.751832e-02 1.114723e-02 4.390173e-03 1.820703e-04 -2.847072e-02
## 2243 1.530367e-02 1.068843e-03 2.186503e-02 -1.559637e-03 6.892143e-03
## 2244 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2245 8.211060e-03 4.093115e-04 1.173646e-02 4.631620e-04 6.497444e-03
## 2246 6.813557e-03 3.069184e-03 -2.102003e-03 -1.055402e-03 1.551741e-02
## 2247 1.470632e-03 2.610530e-03 8.977179e-03 2.432284e-03 -5.282452e-03
## 2248 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
## 2249 3.942490e-03 2.627860e-02 -1.193438e-02 2.218708e-03 9.313488e-03
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## 2252 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2253 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2254 1.926595e-02 1.677276e-02 -4.688841e-03 6.631714e-05 7.194858e-03
## 2255 1.914034e-02 -4.661004e-02 8.281465e-03 -5.523933e-03 -8.830078e-03
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## 2258 1.849968e-02 1.988373e-02 1.072570e-03 -2.473321e-03 -1.029308e-02
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## 2260 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
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## 2268 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2269 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 2272 -2.193654e-02 2.180842e-02 -1.540373e-03 -2.952992e-02 1.502488e-02
## 2273 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
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## 2277 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2278 -4.179386e-03 1.458241e-02 4.063034e-03 3.102546e-02 -1.183776e-02
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## 2280 -1.060952e-03 7.770470e-03 4.876724e-02 -3.459334e-03 4.208557e-02
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## 2282 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 2283 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03

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## 2302 1.633158e-02 6.587340e-03 6.090902e-03 3.427471e-02 1.130399e-02
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## 2318 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 2329 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
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## 2335 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 2336 4.271634e-03 1.561775e-02 1.013193e-02 -9.714061e-04 -4.839093e-02
## 2337 -3.233458e-02 -1.024712e-02 -7.867239e-03 2.520398e-02 -6.891696e-03

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## 2338 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2339 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2340 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2341 -1.137725e-02 2.056757e-02 -5.356597e-03 -1.062860e-02 3.608371e-02
## 2342 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 2343 -6.300737e-04 3.225123e-02 -1.483943e-02 -2.013564e-02 -1.084152e-02
## 2344 -7.911414e-04 -1.215739e-02 -4.942128e-03 -2.077767e-02 2.483950e-02
## 2345 -2.599012e-02 -3.852055e-02 1.333399e-02 4.775197e-02 -1.664358e-02
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## 2347 -2.841672e-03 4.632293e-02 -1.383501e-02 6.169706e-02 -2.322363e-02
## 2348 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2349 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 2350 6.061978e-02 7.327639e-03 1.302391e-02 6.837084e-02 1.644530e-02
## 2351 -1.796065e-03 5.821026e-03 3.147769e-02 -4.467666e-03 8.688163e-03
## 2352 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 2353 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2354 8.828702e-03 -1.734842e-02 -8.203964e-03 -2.971591e-02 -4.599265e-02
## 2355 5.714398e-04 3.485149e-02 -1.213663e-02 2.813196e-02 -2.887381e-02
## 2356 -4.113592e-02 8.127322e-03 -8.284569e-03 -8.818733e-03 2.399724e-02
## 2357 2.362460e-02 -8.912539e-03 2.776002e-03 -7.097338e-03 -6.989809e-03
## 2358 -1.029791e-03 2.710055e-03 2.571628e-02 -1.928027e-03 2.617610e-02
## 2359 -1.939251e-02 7.744853e-03 -4.199832e-04 -7.632834e-04 -1.703900e-02
## 2360 1.087931e-02 -1.526669e-03 7.851320e-03 3.038896e-02 1.106237e-02
## 2361 -1.880345e-04 4.152575e-03 -4.232570e-04 1.663645e-02 9.815898e-04
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## 2363 -4.766104e-03 7.441584e-03 4.740209e-02 -1.921827e-02 -3.109703e-02
## 2364 5.082688e-02 5.617397e-04 -3.953595e-03 6.430190e-02 2.761329e-02
## 2365 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2366 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
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## 2368 6.070232e-03 -3.582426e-02 1.040019e-02 9.133929e-03 -1.843655e-02
## 2369 2.271365e-02 -3.081360e-02 -3.641275e-03 -3.087104e-02 -4.998298e-02
## 2370 2.236906e-03 -5.004411e-04 3.215769e-03 4.971922e-03 1.220549e-02
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## 2372 4.028080e-02 3.453995e-02 -8.687492e-03 -2.630254e-03 1.295521e-02
## 2373 4.249441e-02 -1.724506e-02 8.410565e-03 1.109566e-02 1.296755e-02
## 2374 -2.027812e-02 3.000021e-03 7.971653e-03 -1.315643e-02 2.585576e-03
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## 2376 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 2377 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2378 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 2379 -1.405912e-02 -2.001607e-02 1.341780e-02 3.992716e-02 4.306041e-04
## 2380 1.579739e-02 1.358069e-02 7.948632e-03 2.986795e-02 -3.621000e-02
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## 2383 5.670162e-03 2.292523e-05 4.166962e-03 5.603180e-03 5.732150e-03
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## 2385 -1.405912e-02 -2.001607e-02 1.341780e-02 3.992716e-02 4.306041e-04
## 2386 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2387 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2388 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
## 2389 2.304895e-02 -4.272279e-03 -7.949674e-03 1.169808e-02 1.723313e-02
## 2390 7.876013e-04 6.988506e-03 4.007071e-03 5.992856e-04 -1.438375e-02
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## 2395 -6.000653e-03 -1.896122e-02 -7.910546e-02  7.281520e-03 -1.231337e-02
## 2396 -5.757632e-03  1.111250e-02 -3.446638e-03  3.595721e-02  1.161695e-02
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## 2398 -6.776123e-04  5.570806e-03  3.308557e-02 -1.981704e-03  1.479091e-02
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## 2400 -1.387827e-02  3.300196e-02 -6.634953e-04 -1.604594e-02 -2.180200e-02
## 2401 -1.077052e-02  4.075703e-02 -4.172175e-03 -9.768089e-03 -1.559361e-02
## 2402 -2.559275e-02 -1.472266e-02  1.736498e-02  3.968072e-02  1.274241e-03
## 2403  3.420046e-02 -1.329059e-02 -1.125348e-02 -1.681193e-02 -5.236269e-03
## 2404  1.087931e-02 -1.526669e-03  7.851320e-03  3.038896e-02  1.106237e-02
## 2405 -5.617467e-02 -1.813222e-02 -4.859693e-03 -7.271770e-03  7.146723e-04
## 2406 -3.289905e-03  2.357279e-02 -1.571099e-02 -6.614078e-02  9.026384e-03
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## 2408  4.870051e-02 -1.382472e-02 -4.503183e-03  2.103352e-02  1.225808e-02
## 2409  1.242786e-02 -4.175645e-03  3.939271e-03  6.609139e-03  5.682323e-03
## 2410  7.351131e-04  1.949444e-03  1.728955e-02  1.008332e-03  3.339741e-02
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## 2416 -9.824357e-04  3.097396e-02 -1.038229e-02  2.499304e-02 -3.197800e-02
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## 2418 -1.412725e-03  3.621361e-03  1.579603e-02 -2.990036e-03 -1.860650e-02
## 2419 -2.531178e-03  3.871582e-03  1.418814e-02 -5.475997e-03 -2.470925e-02
## 2420  4.116287e-03 -3.854610e-03  5.921302e-03  2.464256e-03  2.627956e-03
## 2421  2.064016e-02 -2.803118e-03  1.409475e-02  5.829196e-02  1.602200e-02
## 2422 -1.862624e-02  4.633882e-03 -6.181394e-03  1.776355e-03  4.489378e-04
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## 2425  2.672328e-03  3.627315e-03 -1.464553e-04  5.624885e-03  9.206939e-03
## 2426  1.118453e-03 -2.502206e-04  1.607884e-03  2.485961e-03  6.102744e-03
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## 2430 -2.081809e-02  2.155820e-02  6.751093e-05 -2.704396e-02  2.112763e-02
## 2431  2.672328e-03  3.627315e-03 -1.464553e-04  5.624885e-03  9.206939e-03
## 2432  2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03  4.395387e-03
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## 2439  4.271634e-03  1.561775e-02  1.013193e-02 -9.714061e-04 -4.839093e-02
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## 2453 -3.471984e-03 1.062143e-02 -1.474237e-02 7.718944e-04 3.128416e-03
## 2454 -3.267581e-02 2.157414e-02 -1.139153e-02 -1.447713e-02 2.732571e-02
## 2455 2.672328e-03 3.627315e-03 -1.464553e-04 5.624885e-03 9.206939e-03
## 2456 3.586682e-03 -4.168211e-02 -4.673413e-03 -5.936275e-02 -1.459185e-02
## 2457 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2458 -6.756122e-03 5.663918e-02 -1.719388e-02 2.848177e-02 -2.320265e-03
## 2459 9.475141e-03 1.537348e-02 -4.202669e-03 1.012948e-02 -1.447475e-02
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## 2461 1.986967e-02 2.461357e-02 6.096492e-02 2.310899e-02 7.410617e-03
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## 2463 3.872693e-02 3.066242e-02 -6.933152e-03 -5.769178e-03 9.851019e-03
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## 2467 -1.595391e-02 8.261197e-03 -6.327849e-03 7.401240e-03 9.655877e-03
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## 2489 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
## 2490 1.553876e-03 3.877535e-03 -1.754340e-03 3.138924e-03 3.104195e-03
## 2491 2.236906e-03 -5.004411e-04 3.215769e-03 4.971922e-03 1.220549e-02
## 2492 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2493 -2.735915e-02 1.402749e-02 6.569634e-03 4.305731e-02 -2.901867e-03
## 2494 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2495 -4.442153e-02 -4.922180e-02 1.128943e-02 1.333668e-02 -5.829760e-02
## 2496 2.738870e-02 -1.562790e-02 1.328010e-03 -4.579404e-03 7.023343e-03
## 2497 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 2498 -7.769518e-02 2.856101e-02 -1.559789e-02 -3.566731e-02 7.442232e-02
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## 2501 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2502 -6.300737e-04 3.225123e-02 -1.483943e-02 -2.013564e-02 -1.084152e-02
## 2503 -1.482540e-02 -1.690510e-02 1.917921e-02 3.738752e-02 -1.705734e-02
## 2504 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2505 2.171854e-02 -1.565082e-02 -2.838953e-03 -1.018258e-02 1.291193e-03
## 2506 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2507 1.777112e-02 3.803339e-02 -1.079067e-02 -1.322534e-02 3.650352e-02
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## 2511 3.790781e-03 3.377094e-03 1.461429e-03 8.110846e-03 1.530968e-02
## 2512 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
## 2513 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 2515 -1.796065e-03 5.821026e-03 3.147769e-02 -4.467666e-03 8.688163e-03
## 2516 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 2517 2.327242e-02 -1.177329e-02 -4.593292e-03 -7.043661e-03 4.395387e-03
## 2518 2.509839e-02 -2.040803e-02 2.628469e-03 -8.553303e-04 3.915020e-02
## 2519 2.439087e-02 -1.202351e-02 -2.985408e-03 -4.557699e-03 1.049813e-02
## 2520 8.436420e-03 -5.133844e-02 1.046046e-02 -1.903989e-02 2.008640e-02
## 2521 2.188741e-02 3.417878e-02 -4.869365e-03 -1.076108e-02 3.913147e-02
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## 2548 -1.551848e-02 1.238895e-02 -9.690073e-03 8.054203e-03 6.657327e-03
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## 2552 -1.707236e-02 8.511417e-03 -7.935733e-03 4.915279e-03 3.553132e-03
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## 2657 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 2689 -2.531178e-03 3.871582e-03 1.418814e-02 -5.475997e-03 -2.470925e-02
## 2690 -1.862624e-02 4.633882e-03 -6.181394e-03 1.776355e-03 4.489378e-04
## 2691 -1.276403e-02 7.224349e-02 -2.191792e-02 3.336740e-02 -2.035013e-02
## 2692 -1.600966e-02 -1.565813e-04 1.198820e-02 -2.976100e-03 -2.189539e-02
## 2693 -6.956624e-03 2.590689e-02 -1.511924e-02 -4.169656e-02 -3.111481e-02
## 2694 -1.893871e-02 1.820403e-02 2.773044e-03 -2.955163e-02 1.155010e-02
## 2695 1.087931e-02 -1.526669e-03 7.851320e-03 3.038896e-02 1.106237e-02
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## 2697 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
## 2698 -3.842799e-03 3.149922e-02 -1.065909e-02 3.600460e-02 -4.020335e-02
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## 2704 2.991615e-03 4.752505e-03 1.948753e-02 -1.069756e-02 1.611719e-02
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## 2708 -7.662743e-04 3.110971e-03 5.761410e-03 -2.539639e-03 -1.748794e-02
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## 2711 -1.412725e-03 3.621361e-03 1.579603e-02 -2.990036e-03 -1.860650e-02
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## 2713 3.055558e-02 -1.261938e-02 -8.741500e-03 -3.453921e-02 1.102709e-02
## 2714 1.118453e-03 -2.502206e-04 1.607884e-03 2.485961e-03 6.102744e-03
## 2715 4.550987e-02 -1.721601e-02 -8.922088e-03 -1.268875e-02 -5.656690e-03

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## 2718 -1.595391e-02 8.261197e-03 -6.327849e-03 7.401240e-03 9.655877e-03
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## 2726 2.009314e-02 3.229859e-02 3.502387e-04 8.393797e-02 -1.895455e-02
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## 2752 4.028080e-02 3.453995e-02 -8.687492e-03 -2.630254e-03 1.295521e-02
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## 2773	4.720018e-04	2.601700e-04	1.164250e-02	2.035563e-03	4.984181e-03
## 2774	4.028080e-02	3.453995e-02	-8.687492e-03	-2.630254e-03	1.295521e-02
## 2775	-6.264169e-03	-1.936213e-02	-5.915059e-02	7.893131e-03	3.135068e-02
## 2776	1.118453e-03	-2.502206e-04	1.607884e-03	2.485961e-03	6.102744e-03
## 2777	1.556109e-02	4.919006e-02	-1.101000e-02	7.866244e-02	-1.083482e-02
## 2778	1.118453e-03	-2.502206e-04	1.607884e-03	2.485961e-03	6.102744e-03
## 2779	-1.862624e-02	4.633882e-03	-6.181394e-03	1.776355e-03	4.489378e-04
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## 2781	2.672328e-03	3.627315e-03	-1.464553e-04	5.624885e-03	9.206939e-03
## 2782	6.921120e-03	5.425807e-03	8.651169e-03	1.183702e-02	1.647429e-03
## 2783	-1.402474e-02	-3.227756e-03	-1.312139e-02	-2.955283e-02	-2.945600e-02
## 2784	3.071312e-02	-1.381630e-02	9.165893e-03	1.518078e-02	-1.123712e-02
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## 2786	2.171854e-02	-1.565082e-02	-2.838953e-03	-1.018258e-02	1.291193e-03
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## 2788	2.283699e-02	-1.590105e-02	-1.231068e-03	-7.696624e-03	7.393937e-03
## 2789	1.118453e-03	-2.502206e-04	1.607884e-03	2.485961e-03	6.102744e-03
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## 2791	2.672328e-03	3.627315e-03	-1.464553e-04	5.624885e-03	9.206939e-03
## 2792	3.303327e-02	-1.304974e-02	1.650143e-03	2.085934e-02	9.355015e-03
## 2793	-1.348487e-02	-2.238201e-02	1.670536e-03	4.685887e-03	-2.017838e-02
## 2794	-3.211111e-02	-1.774813e-02	-4.510857e-03	6.462242e-03	-1.972944e-02
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## 2796	-1.862624e-02	4.633882e-03	-6.181394e-03	1.776355e-03	4.489378e-04
## 2797	-2.914518e-03	6.071247e-03	2.986981e-02	-6.953627e-03	2.585419e-03
## 2798	1.354631e-02	-4.425866e-03	5.547156e-03	9.095100e-03	1.178507e-02
## 2799	2.823989e-02	4.676015e-03	-9.491983e-04	-1.104995e-03	-1.380215e-02
## 2800	-9.492935e-03	5.300331e-02	-2.374720e-02	-1.984245e-02	-6.619701e-02
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## 2	-7.146840e-03	3.545834e-03	1.025446e-02	-8.169350e-03	-1.060689e-02
## 3	2.427954e-02	4.826950e-02	1.427567e-02	5.997223e-03	-1.599748e-02
## 4	-4.740079e-03	6.031493e-05	-1.252497e-02	-5.457472e-03	-2.495475e-05
## 5	-1.589240e-03	-1.154883e-02	-7.728714e-03	-2.042156e-02	-1.391598e-02
## 6	-6.065475e-03	-1.401973e-02	2.896993e-03	-3.120249e-03	1.809068e-03
## 7	1.329649e-02	2.972515e-02	-1.291517e-02	-5.180592e-02	1.476724e-03
## 8	1.093252e-02	1.676600e-02	1.144222e-03	-6.681142e-03	-1.349444e-02
## 9	4.080779e-03	3.361156e-03	-8.928944e-03	-2.230065e-02	-1.669691e-02
## 10	-4.645223e-02	-2.449825e-03	-7.081466e-03	2.081973e-02	4.597476e-03
## 11	3.432955e-03	4.621853e-03	1.423342e-02	3.394126e-03	-1.091796e-02
## 12	-4.402259e-03	-2.799431e-02	-1.600187e-02	-2.299421e-02	9.752458e-03
## 13	5.144129e-02	-3.774837e-02	-3.808471e-03	-1.265397e-02	6.308111e-02
## 14	-7.430870e-03	4.154355e-03	3.441496e-05	3.229595e-03	6.456620e-03
## 15	-3.939435e-03	1.527464e-02	-1.704279e-02	-1.071611e-02	-7.474851e-03
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## 17	8.004333e-03	-3.002890e-02	-2.851734e-02	-1.596795e-02	-2.608234e-02
## 18	3.432955e-03	4.621853e-03	1.423342e-02	3.394126e-03	-1.091796e-02
## 19	-4.407935e-03	-2.230177e-02	-2.734806e-02	-3.820815e-02	-9.831833e-04
## 20	1.454803e-02	4.093465e-03	-9.446653e-03	2.425359e-03	-4.302575e-03
## 21	6.035262e-03	-2.222714e-02	8.916940e-04	6.092061e-02	1.904366e-02
## 22	-2.890828e-02	-2.638207e-02	8.176396e-02	-5.964956e-03	-1.187192e-02

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## 98 -1.325673e-02 1.089215e-02 6.779802e-02 1.126798e-01 5.341591e-02
## 99 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
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## 608 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 681	6.950613e-04	-2.947921e-03	-1.957543e-03	-6.561149e-04	-3.921866e-04
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## 687	3.528805e-03	-1.125564e-04	-5.451730e-03	-2.254160e-03	-4.980340e-03
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## 689	-1.453991e-02	-1.929733e-02	-1.275822e-03	-2.365305e-02	-9.225981e-03
## 690	1.352753e-03	5.337002e-03	-1.554057e-02	-1.300378e-02	-9.735504e-03
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## 843 -4.346422e-03 -3.603669e-03 8.103057e-03 -1.779479e-02 -2.234519e-02
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## 936 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 959  1.171428e-02  1.258100e-03 -5.952466e-03  4.023405e-03  2.855779e-04
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## 1118 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
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## 1120 -1.604683e-02 -1.139823e-03 6.632861e-02 4.089870e-02 -2.226308e-02
## 1121 -7.884012e-03 4.382644e-02 2.606627e-03 -3.776294e-02 4.058484e-02
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## 1124 1.713270e-02 5.181533e-02 2.453013e-02 -2.172127e-03 -2.660438e-02
## 1125 -2.202354e-02 2.815433e-02 -5.912452e-03 -3.076248e-02 5.516337e-02
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## 1225 5.592979e-03 -1.600529e-02 -2.368270e-03 1.579927e-02 1.106708e-02
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## 1232 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 1294 2.497460e-02 4.532158e-02 1.231813e-02 5.341108e-03 -1.638967e-02
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## 1302 1.734363e-02 1.234981e-02 -1.932589e-03 3.097019e-02 -3.313869e-02
## 1303 5.776766e-03 -2.141093e-02 -8.635003e-03 1.446966e-02 1.030050e-02
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## 1305 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1306 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 1307 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 1309 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
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## 1312 -1.664527e-02 -1.509575e-02 -1.081961e-03 -1.468372e-02 2.120128e-03
## 1313 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1314 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1315 4.066603e-03 2.235184e-02 2.521018e-02 5.497558e-02 2.499969e-02
## 1316 -4.705145e-02 -4.236313e-03 -2.480907e-02 1.582756e-02 1.092728e-02
## 1317 9.457654e-04 -1.354131e-02 9.605286e-03 -2.008246e-02 -2.460584e-02
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## 1329 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 1394 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 1429 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 1479 7.403717e-03 1.687855e-02 6.595952e-03 -4.426981e-03 -8.514101e-03
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## 1487 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 1642  1.748000e-02  6.581645e-03 -9.973692e-03 -1.945603e-02  6.089409e-03

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## 1643 3.120952e-02 -1.781365e-03 3.096945e-02 -1.328063e-03 3.818462e-02
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## 1645 -6.467403e-03 -2.029760e-02 3.459368e-03 -1.724967e-05 -1.315460e-02
## 1646 1.113021e-02 2.388135e-03 -7.528533e-03 3.553481e-03 1.260529e-03
## 1647 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 1648 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1649 2.655405e-02 -7.382673e-04 -2.956632e-02 2.936629e-02 1.101089e-03
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## 1651 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1652 5.295663e-03 4.129113e-03 -4.371274e-02 4.246821e-02 -3.201420e-02
## 1653 -1.506424e-02 -7.093627e-03 -1.048759e-02 -1.079311e-02 -1.094906e-03
## 1654 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1655 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1656 -1.506424e-02 -7.093627e-03 -1.048759e-02 -1.079311e-02 -1.094906e-03
## 1657 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1658 2.091201e-02 1.345414e-03 -4.424789e-02 4.551618e-02 -3.320490e-02
## 1659 2.649957e-03 8.241009e-03 2.772546e-03 -2.684399e-04 -3.821577e-03
## 1660 7.215383e-03 7.900635e-03 -6.445091e-03 -1.462839e-02 1.713418e-02
## 1661 1.553483e-02 -4.944289e-03 -2.557140e-02 2.468677e-02 4.233241e-04
## 1662 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
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## 1664 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 1665 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1666 -1.254266e-02 -3.000232e-02 -1.602192e-02 1.249711e-02 3.026852e-02
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## 1671 -7.220361e-04 8.327547e-03 2.397427e-02 5.618595e-02 3.301724e-02
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## 1673 1.454803e-02 4.093465e-03 -9.446653e-03 2.425359e-03 -4.302575e-03
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## 1675 -4.361849e-02 3.855397e-04 -1.057565e-02 1.922168e-02 9.323109e-06
## 1676 1.748000e-02 6.581645e-03 -9.973692e-03 -1.945603e-02 6.089409e-03
## 1677 2.730325e-03 -2.021029e-02 -3.483606e-02 4.147553e-02 -4.664507e-02
## 1678 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 1679 4.600602e-03 7.077034e-03 -4.175520e-02 4.312433e-02 -3.162201e-02
## 1680 5.160157e-02 -2.038551e-02 6.046190e-03 -1.011305e-02 4.020804e-02
## 1681 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
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## 1683 1.454803e-02 4.093465e-03 -9.446653e-03 2.425359e-03 -4.302575e-03
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## 1695 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 1699  1.171428e-02  1.258100e-03 -5.952466e-03  4.023405e-03  2.855779e-04
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## 1704 -8.749172e-03 -1.965925e-02  3.476340e-03 -1.846569e-02 -2.028302e-02
## 1705  4.080779e-03  3.361156e-03 -8.928944e-03 -2.230065e-02 -1.669691e-02
## 1706  1.247035e-03  5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 1707 -7.316903e-03  1.534709e-02  3.075152e-02  2.797012e-02  1.069377e-02
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## 1711  3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
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## 1715  2.649957e-03  8.241009e-03  2.772546e-03 -2.684399e-04 -3.821577e-03
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## 1720 -1.575930e-02 -4.145707e-03 -8.530045e-03 -1.013699e-02 -7.027192e-04
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## 1733  6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 1795 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 1799 1.296132e-02 1.783892e-03 -1.138722e-02 -1.667920e-02 -1.182318e-02
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## 1802 4.657208e-05 -3.754264e-03 2.405709e-02 6.154434e-02 2.851487e-02
## 1803 4.775840e-03 4.132353e-04 -1.088649e-02 -2.295676e-02 -1.708910e-02
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## 1814 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1815 3.316007e-02 4.669224e-02 1.181739e-02 1.161867e-02 -1.112375e-02
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## 1818 6.823725e-03 8.001638e-03 1.265247e-02 1.758092e-02 -1.298904e-02
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## 1822 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
## 1823 -1.634338e-02 -3.015672e-03 -1.010611e-02 -1.060692e-02 2.722318e-04
## 1824 3.439643e-03 -3.448807e-02 -2.821387e-02 -1.548098e-02 1.996717e-02
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## 1826 -2.560612e-02 -4.743802e-02 -1.301011e-03 -1.146351e-02 -1.013509e-03
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## 1828 5.920297e-02 -1.788482e-02 3.969386e-03 -4.305413e-03 4.644891e-02
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## 1846 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1847 3.432955e-03 4.621853e-03 1.423342e-02 3.394126e-03 -1.091796e-02
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## 1861 -1.973945e-03 1.845220e-02 6.780804e-03 8.013466e-04 -1.466980e-02
## 1862 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 1863 -3.991227e-03 -3.033371e-02 -2.817946e-02 -1.225138e-02 2.642379e-02
## 1864 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 1865 5.667487e-03 5.670729e-03 -6.988374e-03 -3.196091e-03 -9.176307e-03
## 1866 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
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## 1875 -4.988519e-02 -7.071678e-03 -2.131488e-02 1.742560e-02 1.551543e-02
## 1876 -6.735808e-03 1.206434e-03 -1.923128e-03 2.573480e-03 6.064433e-03
## 1877 9.892789e-03 -2.860607e-03 -4.025297e-02 4.083666e-02 -3.388267e-02
## 1878 -4.680074e-02 -1.482970e-02 -1.324624e-02 -3.598785e-03 -1.328638e-02
## 1879 1.079939e-02 -2.162977e-02 -1.534081e-02 -8.024672e-03 1.143611e-02
## 1880 2.865826e-02 3.935004e-02 3.811437e-02 -1.069111e-02 -5.152128e-02
## 1881 -2.637288e-02 2.623869e-03 2.359895e-02 8.714317e-03 -8.330816e-03
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## 1885 -3.331760e-02 1.729380e-02 1.289903e-02 -2.950046e-03 -7.314295e-03
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## 1896 -4.919013e-02 -1.001960e-02 -2.327242e-02 1.676949e-02 1.512325e-02
## 1897 -1.216634e-02 2.382415e-02 5.701508e-04 -9.073807e-03 1.356051e-02
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## 1899 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1900 2.091201e-02 1.345414e-03 -4.424789e-02 4.551618e-02 -3.320490e-02
## 1901 -1.686324e-02 1.849158e-02 1.947153e-02 6.530831e-03 -7.003762e-03
## 1902 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
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## 1914 9.728979e-03 3.493678e-02 1.793418e-02 2.254855e-03 -1.809028e-02
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## 1916 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
## 1917 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1918 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1919 4.274861e-02 -1.908260e-02 -2.603116e-03 -1.378629e-02 4.613838e-02
## 1920 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 1926 -3.331760e-02 1.729380e-02 1.289903e-02 -2.950046e-03 -7.314295e-03
## 1927 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1928 9.161834e-03 -4.416644e-02 6.641096e-02 -1.235905e-03 -2.654329e-02
## 1929 -2.718740e-02 1.133764e-02 2.150891e-02 1.195196e-03 -8.073713e-03
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## 1938 2.833744e-03 2.835365e-03 -3.494187e-03 -1.598046e-03 -4.588153e-03
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## 1940 -3.542432e-02 2.025781e-02 2.703448e-02 6.206945e-03 -1.807672e-03
## 1941 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1942 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 1955 -3.035914e-19 -2.717076e-19 -2.491829e-19 -8.758209e-19 1.011023e-19
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## 1958 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1959 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1960 -8.866858e-03 1.027512e-02 -6.243283e-03 -1.523746e-02 -9.591210e-03
## 1961 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 1962 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 1963 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 1964 -1.564831e-02 -5.963593e-03 -1.206365e-02 -1.126303e-02 -1.199548e-04
## 1965 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 1969 4.876782e-02 -2.322087e-02 9.540376e-03 -8.515009e-03 4.479620e-02
## 1970 2.111708e-03 1.116291e-02 2.048009e-02 5.458791e-02 2.842908e-02
## 1971 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1972 -1.634338e-02 -3.015672e-03 -1.010611e-02 -1.060692e-02 2.722318e-04
## 1973 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
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## 1976 8.976966e-03 5.194886e-03 2.561967e-03 1.056720e-02 -5.864257e-03
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## 1981 3.432955e-03 4.621853e-03 1.423342e-02 3.394126e-03 -1.091796e-02
## 1982 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1983 1.454803e-02 4.093465e-03 -9.446653e-03 2.425359e-03 -4.302575e-03
## 1984 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 1986 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 1987 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
## 1988 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 1989 -5.324155e-03 1.190349e-03 -1.410104e-02 -5.927396e-03 9.499963e-04
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## 1991 -4.807689e-03 1.561684e-02 1.027499e-02 2.399392e-03 -1.008164e-02
## 1992 -2.637288e-02 2.623869e-03 2.359895e-02 8.714317e-03 -8.330816e-03
## 1993 -4.988519e-02 -7.071678e-03 -2.131488e-02 1.742560e-02 1.551543e-02
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## 2007 3.432955e-03 4.621853e-03 1.423342e-02 3.394126e-03 -1.091796e-02
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## 2013 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
## 2014 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
## 2015 1.353729e-02 -1.406000e-02 8.501528e-04 -3.974432e-03 9.103407e-04
## 2016 -1.893909e-02 2.039630e-02 2.156190e-03 -5.178687e-02 2.636156e-02
## 2017 1.579506e-02 4.619257e-03 -1.488141e-02 -1.827724e-02 -1.641134e-02
## 2018 7.587503e-03 1.147291e-02 3.292190e-04 -5.756587e-03 -9.280678e-03
## 2019 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2020 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04

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## 2023 1.514724e-02 5.879953e-03 8.280950e-03 7.417531e-03 -1.063238e-02
## 2024 7.731662e-03 -1.022200e-02 -3.904914e-03 1.485734e-02 6.871109e-03
## 2025 3.651827e-04 8.562894e-03 2.321791e-02 6.569227e-03 -2.975823e-02
## 2026 5.101579e-02 -4.451925e-02 6.357103e-03 8.208814e-03 6.007703e-02
## 2027 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2029 4.289158e-02 9.086827e-02 3.553972e-02 1.519054e-02 -2.281866e-02
## 2030 -9.021029e-03 3.440511e-02 6.749904e-03 -3.153988e-02 3.359283e-02
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## 2032 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
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## 2034 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2035 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2036 1.454803e-02 4.093465e-03 -9.446653e-03 2.425359e-03 -4.302575e-03
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## 2038 2.663681e-03 1.463662e-02 1.700287e-02 3.454142e-02 1.671251e-02
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## 2168 -8.152906e-03 1.248190e-02 2.400869e-02 5.941555e-02 3.947386e-02
## 2169 -5.736779e-03 2.534117e-02 1.772284e-02 4.632563e-03 -3.311789e-02
## 2170 -5.324155e-03 1.190349e-03 -1.410104e-02 -5.927396e-03 9.499963e-04
## 2171 -7.664899e-03 1.093076e-02 5.524724e-03 4.806651e-03 -1.697181e-02
## 2172 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2177 6.823725e-03 8.001638e-03 1.265247e-02 1.758092e-02 -1.298904e-02
## 2178 5.205787e-04 1.230142e-02 5.023988e-03 1.108422e-02 -1.170589e-02
## 2179 2.111708e-03 1.116291e-02 2.048009e-02 5.458791e-02 2.842908e-02
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## 2181 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 2189 3.432955e-03 4.621853e-03 1.423342e-02 3.394126e-03 -1.091796e-02
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## 2198 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2199 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2200 4.572533e-02 9.370364e-02 3.204553e-02 1.359249e-02 -2.740681e-02
## 2201 -8.814633e-20 -8.391739e-20 -8.857845e-20 -2.841350e-19 3.287488e-21
## 2202 -2.131109e-02 -2.440453e-02 8.513045e-03 -6.206502e-03 1.084601e-04
## 2203 1.113021e-02 2.388135e-03 -7.528533e-03 3.553481e-03 1.260529e-03
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## 2214 -6.173996e-02 2.449807e-02 -1.107079e-02 -1.251624e-02 5.369642e-02
## 2215 2.655405e-02 -7.382673e-04 -2.956632e-02 2.936629e-02 1.101089e-03
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## 2252 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2282 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 2341  1.028610e-02 -3.066724e-02 -2.853431e-02  2.480496e-03 -1.895392e-02
## 2342  1.247035e-03  5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2343 -1.302519e-03  2.429164e-02  1.476915e-02 -8.909277e-03 -3.814067e-03
## 2344 -8.847967e-03  1.542982e-02  2.596623e-02  6.007166e-02  3.986604e-02

```

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## 2345 1.256272e-02 3.777215e-02 1.443999e-02 6.568090e-04 -2.267843e-02
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## 2347 -4.360434e-02 -5.238625e-02 2.738544e-02 -7.250917e-03 -1.182648e-02
## 2348 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2349 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2350 1.444927e-02 -8.661547e-02 1.053193e-01 -2.097818e-02 -8.743960e-03
## 2351 -4.629094e-03 -1.757572e-03 -1.605858e-02 -6.583511e-03 5.578097e-04
## 2352 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2353 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2354 -1.282969e-02 4.632618e-03 1.387891e-02 -1.777638e-03 -2.895062e-02
## 2355 -4.705145e-02 -4.236313e-03 -2.480907e-02 1.582756e-02 1.092728e-02
## 2356 -1.700623e-04 1.180126e-02 2.049706e-02 3.613947e-02 2.130066e-02
## 2357 7.812218e-03 5.299899e-03 -1.136978e-02 4.998840e-03 1.761858e-03
## 2358 -1.634338e-02 -3.015672e-03 -1.010611e-02 -1.060692e-02 2.722318e-04
## 2359 1.296132e-02 1.783892e-03 -1.138722e-02 -1.667920e-02 -1.182318e-02
## 2360 9.892789e-03 -2.860607e-03 -4.025297e-02 4.083666e-02 -3.388267e-02
## 2361 3.779509e-03 -1.070594e-02 6.111099e-03 -2.168050e-02 -2.919400e-02
## 2362 -4.705145e-02 -4.236313e-03 -2.480907e-02 1.582756e-02 1.092728e-02
## 2363 -1.686324e-02 1.849158e-02 1.947153e-02 6.530831e-03 -7.003762e-03
## 2364 -2.768099e-02 -3.492317e-02 5.909127e-02 -3.184337e-02 3.214816e-02
## 2365 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2366 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2367 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2368 -1.137978e-02 -3.896440e-02 -1.402615e-02 -8.875524e-04 1.204624e-02
## 2369 -1.826942e-02 -2.423500e-03 8.323433e-03 -1.179444e-02 -2.052393e-02
## 2370 1.390123e-03 -5.895842e-03 -3.915086e-03 -1.312230e-03 -7.843731e-04
## 2371 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2372 1.023746e-02 1.971392e-02 3.101765e-03 -6.025027e-03 -1.310225e-02
## 2373 -3.636909e-02 -1.756117e-02 3.251005e-02 1.095123e-02 -1.650507e-02
## 2374 1.254515e-02 -8.764806e-03 1.679608e-02 7.758930e-02 4.897584e-02
## 2375 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2376 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2377 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2378 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2379 2.144579e-02 4.543414e-02 1.776986e-02 7.595268e-03 -1.140933e-02
## 2380 6.898477e-02 -1.892754e-02 -3.274998e-02 3.765729e-02 1.198348e-02
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## 2382 1.422589e-03 9.205182e-02 1.431627e-02 -3.804410e-02 4.479350e-02
## 2383 5.776766e-03 -2.141093e-02 -8.635003e-03 1.446966e-02 1.030050e-02
## 2384 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 2385 2.144579e-02 4.543414e-02 1.776986e-02 7.595268e-03 -1.140933e-02
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## 2387 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2390 1.454803e-02 4.093465e-03 -9.446653e-03 2.425359e-03 -4.302575e-03
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## 2393 2.923328e-02 3.845579e-02 1.317774e-02 7.556494e-03 -1.351065e-02
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## 2395 9.561041e-03 4.064852e-03 4.138034e-03 1.103713e-02 -6.839208e-03
## 2396 1.611225e-02 6.283835e-03 -5.071856e-02 1.759408e-02 -5.477555e-02
## 2397 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2398 -3.934033e-03 -4.705493e-03 -1.801612e-02 -7.239625e-03 1.656231e-04

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## 2401 2.081472e-02 1.155068e-02 1.292576e-03 4.221439e-03 -1.980868e-02
## 2402 3.055755e-03 4.737736e-02 3.785718e-02 -6.966496e-03 -3.791334e-02
## 2403 -1.216634e-02 2.382415e-02 5.701508e-04 -9.073807e-03 1.356051e-02
## 2404 9.892789e-03 -2.860607e-03 -4.025297e-02 4.083666e-02 -3.388267e-02
## 2405 -1.472062e-02 -1.531458e-03 2.415557e-02 3.239710e-02 1.920787e-02
## 2406 1.142499e-02 1.707228e-02 1.162646e-02 -1.710804e-02 -8.524034e-03
## 2407 -4.240517e-02 -2.192634e-02 -5.780180e-02 3.531219e-02 2.486200e-02
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## 2409 1.553483e-02 -4.944289e-03 -2.557140e-02 2.468677e-02 4.233241e-04
## 2410 -1.575930e-02 -4.145707e-03 -8.530045e-03 -1.013699e-02 -7.027192e-04
## 2411 1.553483e-02 -4.944289e-03 -2.557140e-02 2.468677e-02 4.233241e-04
## 2412 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2413 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2414 -1.139887e-02 -2.472350e-04 2.177417e-03 -2.380984e-02 -4.182595e-02
## 2415 5.427503e-02 -3.491300e-02 -7.302658e-03 -1.425202e-02 5.849296e-02
## 2416 -4.988519e-02 -7.071678e-03 -2.131488e-02 1.742560e-02 1.551543e-02
## 2417 9.457654e-04 -1.354131e-02 9.605286e-03 -2.008246e-02 -2.460584e-02
## 2418 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
## 2419 1.113021e-02 2.388135e-03 -7.528533e-03 3.553481e-03 1.260529e-03
## 2420 2.943023e-03 -2.424630e-02 -5.140816e-03 1.606771e-02 1.488865e-02
## 2421 1.909052e-02 -2.773293e-03 -7.854840e-02 8.232944e-02 -6.737315e-02
## 2422 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2423 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2424 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2425 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2426 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2427 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2428 9.457654e-04 -1.354131e-02 9.605286e-03 -2.008246e-02 -2.460584e-02
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## 2430 1.423235e-02 -1.700792e-02 -1.107390e-03 -4.630546e-03 5.181542e-04
## 2431 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2432 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2433 -1.389827e-02 -1.614325e-02 3.493783e-03 3.212346e-03 -6.697976e-03
## 2434 7.509516e-02 8.970533e-03 6.583535e-03 -3.268384e-02 3.856772e-02
## 2435 6.895235e-03 3.210142e-02 2.142837e-02 3.852900e-03 -1.350212e-02
## 2436 8.321997e-02 -4.185624e-02 1.097161e-02 -2.745283e-02 8.508589e-02
## 2437 -1.564831e-02 -5.963593e-03 -1.206365e-02 -1.126303e-02 -1.199548e-04
## 2438 2.566547e-02 7.952302e-03 -1.047443e-02 -1.317847e-02 1.135533e-02
## 2439 5.920297e-02 -1.788482e-02 3.969386e-03 -4.305413e-03 4.644891e-02
## 2440 4.551819e-03 -1.609158e-02 -5.355552e-04 4.662270e-03 -1.247683e-02
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## 2442 6.961760e-03 4.509296e-03 8.781686e-03 1.139965e-03 -1.589830e-02
## 2443 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
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## 2449 6.703960e-03 1.482364e-02 1.311631e-03 -2.313085e-02 -3.323518e-02
## 2450 -2.198143e-02 -9.178363e-03 3.692924e-03 -5.127728e-04 4.363825e-03
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## 2459 5.160157e-02 -2.038551e-02 6.046190e-03 -1.011305e-02 4.020804e-02
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## 2462 -2.071794e-03 3.430641e-02 1.753861e-02 2.223802e-02 2.381640e-02
## 2463 7.403717e-03 1.687855e-02 6.595952e-03 -4.426981e-03 -8.514101e-03
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## 2465 -6.517292e-02 1.987621e-02 -2.530421e-02 -1.591036e-02 6.461437e-02
## 2466 2.649957e-03 8.241009e-03 2.772546e-03 -2.684399e-04 -3.821577e-03
## 2467 4.775840e-03 4.132353e-04 -1.088649e-02 -2.295676e-02 -1.708910e-02
## 2468 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
## 2469 3.528805e-03 -1.125564e-04 -5.451730e-03 -2.254160e-03 -4.980340e-03
## 2470 -2.326411e-03 2.873178e-02 -1.537655e-02 -5.001516e-02 3.727576e-02
## 2471 -3.902065e-03 4.041799e-03 -5.417315e-03 9.754349e-04 1.476280e-03
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## 2473 6.483486e-03 -4.326328e-02 5.171122e-02 4.877129e-03 -3.902797e-03
## 2474 2.663681e-03 1.463662e-02 1.700287e-02 3.454142e-02 1.671251e-02
## 2475 -6.782335e-03 1.049180e-03 -5.968078e-03 4.302111e-04 -6.566976e-03
## 2476 -2.968617e-03 2.391146e-02 -3.772528e-02 3.241897e-02 -1.992997e-02
## 2477 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2478 2.144579e-02 4.543414e-02 1.776986e-02 7.595268e-03 -1.140933e-02
## 2479 5.728878e-03 -4.878829e-02 5.217754e-02 -4.630031e-03 -1.562533e-02
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## 2484 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
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## 2487 4.551819e-03 -1.609158e-02 -5.355552e-04 4.662270e-03 -1.247683e-02
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## 2497 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2498 5.170138e-03 -7.477959e-03 2.334630e-02 9.771619e-02 4.073650e-02
## 2499 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2500 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 2501 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2502 -1.302519e-03 2.429164e-02 1.476915e-02 -8.909277e-03 -3.814067e-03
## 2503 3.316007e-02 4.669224e-02 1.181739e-02 1.161867e-02 -1.112375e-02
## 2504 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 2505 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2506 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04

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## 2509 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
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## 2511 4.223866e-03 -3.060477e-03 -7.409273e-03 -2.910275e-03 -5.372526e-03
## 2512 4.080779e-03 3.361156e-03 -8.928944e-03 -2.230065e-02 -1.669691e-02
## 2513 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2515 -4.629094e-03 -1.757572e-03 -1.605858e-02 -6.583511e-03 5.578097e-04
## 2516 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
## 2517 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
## 2518 2.920559e-03 7.476107e-03 -4.290957e-02 -1.278815e-02 6.780718e-02
## 2519 -3.902065e-03 4.041799e-03 -5.417315e-03 9.754349e-04 1.476280e-03
## 2520 -3.991227e-03 -3.033371e-02 -2.817946e-02 -1.225138e-02 2.642379e-02
## 2521 1.176339e-02 6.743090e-03 2.389277e-02 6.688475e-02 3.519582e-02
## 2522 3.439643e-03 -3.448807e-02 -2.821387e-02 -1.548098e-02 1.996717e-02
## 2523 4.080779e-03 3.361156e-03 -8.928944e-03 -2.230065e-02 -1.669691e-02
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## 2527 -7.697432e-03 5.610139e-02 1.548150e-02 -3.013918e-02 3.520463e-02
## 2528 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
## 2529 3.417232e-02 4.540889e-02 -2.597730e-02 4.683388e-02 -4.988015e-02
## 2530 4.331483e-03 -7.232232e-03 2.633885e-03 -4.172699e-02 -4.091057e-02
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## 2532 -3.151662e-02 -9.180602e-03 -5.038047e-02 4.051433e-02 1.135060e-02
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## 2548 6.914522e-03 6.196521e-03 -1.242313e-02 -2.389869e-02 -2.128507e-02
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## 2560 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04

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## 2586 7.403717e-03 1.687855e-02 6.595952e-03 -4.426981e-03 -8.514101e-03
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## 2611 -1.700623e-04 1.180126e-02 2.049706e-02 3.613947e-02 2.130066e-02
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## 2627 -1.188688e-02 1.303906e-03 2.066138e-02 3.079905e-02 1.461972e-02
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## 2654 4.876782e-02 -2.322087e-02 9.540376e-03 -8.515009e-03 4.479620e-02
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## 2657 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
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## 2692 -2.614690e-02 -2.024776e-02 4.193945e-02 -1.574964e-02 -3.640765e-02
## 2693 2.503865e-03 1.434618e-02 2.168127e-02 5.627296e-03 -3.395420e-02
## 2694 1.578525e-02 -3.535837e-02 -2.333120e-03 1.274939e-02 1.619118e-02
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## 2697 1.171428e-02 1.258100e-03 -5.952466e-03 4.023405e-03 2.855779e-04
## 2698 -4.963449e-02 -1.766507e-02 -9.752052e-03 -2.000739e-03 -8.698225e-03
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## 2704 -4.082388e-03 8.345238e-03 -2.610799e-02 -1.780514e-02 -9.368272e-03
## 2705 -2.531999e-02 1.575954e-03 1.365122e-02 -1.161612e-03 1.002062e-02
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## 2707 1.070361e-03 1.266045e-02 -1.044815e-02 -1.564541e-03 -7.307840e-03
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## 2709 -4.597126e-03 6.989720e-03 -3.459772e-03 1.631550e-03 1.868466e-03
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## 2711 1.182527e-02 -5.597863e-04 -9.486076e-03 2.897366e-03 8.683423e-04
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## 2718 4.775840e-03 4.132353e-04 -1.088649e-02 -2.295676e-02 -1.708910e-02
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## 2720 1.109856e-04 -1.817887e-03 -3.533610e-03 -1.126039e-03 5.827644e-04
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## 2722 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02

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## 2741  4.283413e-03  5.412456e-03 -5.918051e-03  7.253000e-03  6.742197e-03
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## 2743 -8.371795e-03 -5.204266e-03  9.793253e-04 -6.264969e-03 -1.089471e-02
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## 2779 1.247035e-03 5.257917e-04 -5.434757e-03 -2.070260e-02 -1.210876e-02
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## 2786 -7.430870e-03 4.154355e-03 3.441496e-05 3.229595e-03 6.456620e-03
## 2787 4.837528e-02 1.019446e-01 3.481808e-02 1.332405e-02 -3.122839e-02
## 2788 -6.735808e-03 1.206434e-03 -1.923128e-03 2.573480e-03 6.064433e-03
## 2789 6.950613e-04 -2.947921e-03 -1.957543e-03 -6.561149e-04 -3.921866e-04
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## 2792 4.600602e-03 7.077034e-03 -4.175520e-02 4.312433e-02 -3.162201e-02
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## 2798 1.622989e-02 -7.892210e-03 -2.752894e-02 2.403066e-02 3.113758e-05
## 2799 -2.065135e-03 -1.491718e-02 3.577001e-03 6.956428e-03 8.579089e-05
## 2800 -5.021507e-02 4.439138e-03 3.860573e-03 2.465094e-02 -1.385061e-02
##          X15          X16          X17          X18          X19
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## 2      5.872265e-03 -1.744755e-03 -1.130947e-03 -1.052740e-02 -2.798773e-03
## 3      1.448225e-02 -1.062444e-03 -2.263661e-02 2.193782e-02 1.729014e-02
## 4      3.230041e-02 -9.534472e-03 -5.671778e-04 -1.481073e-03 -9.848740e-03
## 5     -3.338022e-04 5.758280e-04 8.158735e-03 -8.549121e-03 -1.285290e-02
## 6     -5.920079e-03 -1.124923e-02 1.687654e-02 -1.220153e-02 -1.385310e-02
## 7     -3.239329e-02 -6.239773e-02 3.880709e-02 3.431536e-02 6.681837e-02
## 8     -1.972945e-03 4.936099e-03 -5.415714e-04 5.868754e-03 -3.718216e-03
## 9     -7.528804e-03 -6.152415e-03 9.280770e-03 2.220123e-03 -5.658770e-03
## 10     9.696951e-03 -1.606710e-02 1.953837e-03 -1.049304e-03 1.075952e-03
## 11     2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 12     -3.265301e-02 -6.593334e-03 2.269065e-02 -2.560269e-03 -5.437994e-03
## 13     -1.503711e-02 -2.107311e-02 -6.386439e-03 -3.742752e-02 2.486628e-02
## 14     2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 15     2.738788e-02 2.301282e-02 8.467005e-04 -7.363576e-03 3.913478e-03
## 16     2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 17     -9.052941e-03 1.421531e-02 -5.033541e-02 2.193124e-02 4.659484e-02
## 18     2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 19     -1.080744e-03 -3.633784e-02 2.566367e-02 -9.325633e-03 -1.203608e-02
## 20     -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
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## 24     3.638253e-02 4.563558e-02 -5.558169e-02 2.784153e-02 6.199594e-02
## 25     6.261968e-03 8.528390e-03 -1.167751e-03 5.662203e-03 -6.042596e-03
## 26     -1.726443e-03 2.193531e-02 -2.756856e-03 7.828873e-03 -1.334195e-02
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## 75 -7.528804e-03 -6.152415e-03 9.280770e-03 2.220123e-03 -5.658770e-03
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## 254 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 255 1.203761e-02 -1.861929e-02 -2.252187e-02 -3.951940e-02 2.785046e-02
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## 261 3.847883e-02 2.047982e-02 4.316470e-03 1.600764e-03 8.084379e-03
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## 265 -2.707472e-02 -2.453820e-03 1.613543e-02 2.091872e-03 -2.984181e-03
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## 286 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 298 -5.905764e-03 -5.919046e-02 2.412691e-02 5.514208e-04 -4.013574e-03
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## 779  4.773005e-03  9.209269e-03 -7.005168e-03  4.754299e-03  7.439174e-03
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## 789  8.380489e-03  1.113361e-02  3.563734e-02 -5.056018e-03 -1.239706e-02
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## 910 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
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## 1128  6.868541e-04 -1.082682e-02  1.765398e-02 -2.208823e-03  1.845198e-03
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## 1302 2.113483e-02 -4.595722e-02 -1.199349e-03 2.050528e-02 -4.973323e-02
## 1303 8.211554e-03 1.552661e-02 1.321704e-02 1.199316e-02 -1.564040e-02
## 1304 3.061268e-02 3.484731e-02 -8.968456e-02 1.417577e-03 1.856784e-02
## 1305 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1306 4.773005e-03 9.209269e-03 -7.005168e-03 4.754299e-03 7.439174e-03
## 1307 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1308 -3.643896e-02 -4.969275e-03 -5.072583e-02 -6.107387e-02 -1.259568e-02
## 1309 9.103428e-04 2.034003e-02 -2.310713e-03 6.805736e-03 -1.416601e-02
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## 1312 -2.369353e-03 -1.052283e-02 7.283345e-03 -1.220493e-02 -4.935826e-03
## 1313 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1314 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1315 6.976690e-03 7.105720e-03 8.019932e-03 6.915585e-03 -4.791097e-03
## 1316 9.440044e-03 -1.040320e-02 -6.344256e-03 1.498121e-02 1.362590e-02
## 1317 1.077994e-02 2.590548e-03 -4.128312e-02 -9.892800e-03 -1.782400e-02
## 1318 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1319 -9.166269e-03 5.857609e-03 2.387482e-02 -4.094328e-02 2.521575e-02
## 1320 1.302144e-02 4.458388e-03 1.696848e-02 -1.540426e-02 -1.001837e-02
## 1321 3.820310e-03 -7.149789e-04 1.693752e-02 7.204167e-03 -7.427717e-03
## 1322 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1323 -5.245824e-02 2.043254e-02 5.972939e-03 1.882014e-02 1.319156e-02
## 1324 4.773005e-03 9.209269e-03 -7.005168e-03 4.754299e-03 7.439174e-03
## 1325 7.274742e-03 4.261806e-02 1.210374e-03 2.084780e-02 -8.538631e-03

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## 1329 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1330 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 1332 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1333 -1.696363e-02 -4.171649e-02 -2.901355e-02 2.804449e-02 -4.183848e-02
## 1334 3.822419e-02 -2.613414e-02 8.577670e-04 -9.154255e-03 -3.383284e-03
## 1335 4.293677e-03 1.314630e-02 -2.075707e-02 1.200284e-02 -2.584785e-02
## 1336 2.889186e-02 -5.098212e-03 2.129923e-02 -1.053807e-03 3.933903e-03
## 1337 3.822419e-02 -2.613414e-02 8.577670e-04 -9.154255e-03 -3.383284e-03
## 1338 9.440044e-03 -1.040320e-02 -6.344256e-03 1.498121e-02 1.362590e-02
## 1339 1.592194e-02 -2.500744e-03 -9.929683e-04 -9.048838e-04 -9.640380e-03
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## 1341 9.696951e-03 -1.606710e-02 1.953837e-03 -1.049304e-03 1.075952e-03
## 1342 2.585271e-03 1.325963e-02 -2.109749e-03 -3.877353e-03 -1.008828e-02
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## 1345 -2.545100e-03 9.724131e-03 -8.235542e-04 1.239840e-02 -2.060259e-03
## 1346 -3.595946e-03 7.903911e-03 1.563040e-02 2.841189e-03 -1.638503e-02
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## 1349 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
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## 1383 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
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## 1387 -7.634396e-03 -6.635231e-02 -4.436609e-02 -1.072269e-02 -2.059330e-02
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## 1389 1.854411e-02 1.216568e-02 6.534719e-03 -5.785201e-03 -8.963073e-03
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## 1391 -1.307519e-03 2.066199e-02 -7.324845e-03 -9.902065e-03 -5.559175e-03
## 1392 4.386169e-03 7.215923e-04 8.626413e-03 -5.017493e-03 -1.088215e-02
## 1393 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1394 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1395 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 1396 1.990474e-02 -8.688516e-03 -3.961126e-02 -4.412455e-03 -1.509010e-02
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## 1401 -6.502087e-04 1.340910e-02 -5.326590e-04 5.626907e-03 -8.113568e-03
## 1402 1.759910e-03 -4.137338e-03 7.611665e-03 -1.191905e-03 -3.268026e-03
## 1403 9.381100e-03 -3.264631e-02 -2.585004e-02 -3.119427e-02 -2.971919e-03
## 1404 -1.450280e-03 -5.159327e-03 -3.261265e-02 -1.215605e-02 -2.349262e-02
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## 1407 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1408 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1409 3.913453e-02 -5.794114e-03 -1.452946e-03 -2.348519e-03 -1.754929e-02
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## 1417 4.674752e-03 8.776074e-03 6.504880e-03 6.369424e-03 -5.497007e-03
## 1418 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1419 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
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## 1421 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1422 -7.528804e-03 -6.152415e-03 9.280770e-03 2.220123e-03 -5.658770e-03
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## 1424 -7.780304e-03 -9.186560e-03 3.071684e-02 2.021759e-02 6.132759e-02
## 1425 -7.762218e-03 -2.888845e-02 1.376627e-02 -1.614108e-02 7.966878e-02
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## 1429 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
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## 1432 -7.528804e-03 -6.152415e-03 9.280770e-03 2.220123e-03 -5.658770e-03
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## 1436 2.525166e-02 1.220826e-02 8.298012e-03 -1.314101e-02 -4.349753e-03
## 1437 1.067210e-02 5.675379e-02 3.130970e-02 6.894345e-02 -1.740609e-02
## 1438 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
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## 1445 7.602790e-03 -2.700505e-03 -1.810940e-02 -3.093831e-02 7.903235e-03
## 1446 3.912903e-02 7.070725e-03 4.849129e-03 -4.026143e-03 1.619795e-02
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## 1448 -2.641821e-02 5.792638e-03 3.055534e-02 -1.393042e-03 -1.545834e-02
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## 1467 -1.032460e-02 -2.603568e-02 -8.282196e-03 2.123571e-02 9.651100e-03
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## 1474 -1.094705e-02 -2.070598e-02 7.809508e-03 3.015842e-03 1.709779e-02
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## 1482 3.670005e-02 -5.766415e-03 -5.875841e-02 1.055686e-02 4.887032e-02
## 1483 -1.735046e-02 -5.020417e-02 -1.338197e-02 1.827270e-02 -6.015980e-02
## 1484 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1485 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1486 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1487 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03

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## 1491 2.134173e-02 5.567546e-02 4.764139e-04 -2.776348e-02 -1.526175e-02
## 1492 -4.789622e-02 -4.090465e-02 -1.219148e-01 -4.087590e-02 -7.061005e-02
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## 1502 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1503 1.592194e-02 -2.500744e-03 -9.929683e-04 -9.048838e-04 -9.640380e-03
## 1504 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1505 1.605676e-02 8.845756e-03 1.262767e-02 -4.402993e-03 -1.472095e-02
## 1506 -4.014562e-03 -1.242428e-02 1.704368e-02 -6.692196e-03 1.835355e-03
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## 1510 4.758201e-03 1.241748e-02 -2.341639e-02 2.501289e-02 6.144579e-03
## 1511 2.139251e-02 3.200068e-02 7.037227e-03 3.868081e-05 -9.981308e-03
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## 1516 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
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## 1529 -3.556276e-02 2.875153e-02 -6.505753e-03 -9.734884e-03 -2.260298e-02
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## 1540 4.755342e-02 -5.076996e-02 -1.449478e-02 -4.792144e-02 1.786190e-02
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## 1598 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1599 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
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## 1605 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 1608 4.086098e-02 -2.772943e-02 1.303910e-03 -1.017739e-02 -4.207341e-03
## 1609 7.409790e-03 7.613983e-03 -6.559026e-03 3.731161e-03 6.615118e-03
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## 1611 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
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## 1638 2.702888e-02 -6.145837e-03 -2.261568e-02 1.002504e-02 1.821943e-02
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## 1646 -1.726443e-03 2.193531e-02 -2.756856e-03 7.828873e-03 -1.334195e-02
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## 1664 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
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## 1666 -2.595261e-03 1.595563e-02 1.356972e-02 1.160969e-02 -9.524061e-03
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## 1672 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 1674 1.855219e-02 -7.386716e-02 -2.098645e-02 1.964245e-02 -5.182704e-02
## 1675 1.176158e-02 -1.287435e-02 2.117997e-03 4.457207e-03 1.909852e-03
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## 1698 -1.593032e-02 -1.734387e-02 -5.208029e-02 5.771527e-02 -2.010200e-02
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## 1706 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
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## 1719 -1.111757e-02 1.102256e-02 -5.049957e-02 1.642473e-02 4.576094e-02
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## 1722 5.961822e-02 -6.104394e-04 -5.206543e-02 3.264579e-03 8.224910e-03
## 1723 -1.061790e-02 2.853883e-03 3.180818e-02 -5.809116e-02 1.888921e-02
## 1724 9.696951e-03 -1.606710e-02 1.953837e-03 -1.049304e-03 1.075952e-03
## 1725 -6.885061e-03 -3.328639e-03 1.947281e-03 -4.038600e-03 1.126043e-04
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## 1780 3.177279e-03 2.196519e-02 -5.900587e-02 2.419449e-02 5.226345e-02
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## 1825 -3.909927e-03 4.346720e-02 -7.821598e-03 -1.462247e-02 -1.091200e-02
## 1826 1.900996e-02 -5.582798e-03 2.176520e-02 -1.960216e-02 -2.028434e-02
## 1827 -4.811131e-03 3.537211e-02 -6.059498e-02 2.636116e-02 4.496410e-02
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## 1831 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1832 9.440044e-03 -1.040320e-02 -6.344256e-03 1.498121e-02 1.362590e-02
## 1833 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1834 3.440217e-03 -1.328476e-02 2.911356e-02 1.482933e-02 5.167737e-02
## 1835 -8.481683e-03 1.365844e-02 2.435687e-02 -5.231372e-02 2.715244e-02
## 1836 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
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## 1838 -3.819628e-02 -1.582834e-03 2.479508e-02 1.438204e-02 -5.651527e-03
## 1839 -1.458183e-20 -7.979624e-21 2.859471e-20 1.180886e-21 -1.768911e-20
## 1840 7.472194e-02 -3.033297e-02 -1.041322e-03 -1.047964e-02 -2.010852e-02
## 1841 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1842 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1843 1.196602e-02 -2.623110e-02 -1.490640e-02 -3.979032e-02 2.042113e-02
## 1844 -1.089676e-02 -2.124765e-02 -8.564179e-03 2.776536e-02 1.130906e-02
## 1845 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1846 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1847 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 1848 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1849 -4.972978e-03 -3.784731e-02 -7.139234e-03 2.009218e-02 1.777451e-02
## 1850 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1851 2.009547e-02 -2.765705e-03 8.322843e-03 -1.152684e-02 -5.519768e-03
## 1852 -1.370408e-02 7.413108e-03 2.929189e-02 2.789077e-02 5.486214e-02
## 1853 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1854 -1.465710e-02 -6.709011e-03 -6.665336e-03 1.852318e-02 1.347206e-02
## 1855 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1856 -1.726443e-03 2.193531e-02 -2.756856e-03 7.828873e-03 -1.334195e-02
## 1857 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1858 -6.132453e-04 1.138169e-01 2.999652e-02 4.484628e-02 -4.111008e-02
## 1859 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 1860 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1861 8.928472e-03 -2.048739e-03 9.239693e-03 -5.312934e-04 3.982251e-03
## 1862 4.773005e-03 9.209269e-03 -7.005168e-03 4.754299e-03 7.439174e-03
## 1863 -3.318011e-02 -4.273425e-04 1.709842e-02 6.191779e-03 3.141997e-03
## 1864 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1865 4.129262e-03 6.385493e-03 3.283203e-04 1.101302e-02 1.667800e-03

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## 1866 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1867 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1868 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
## 1869 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1870 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 1871 -5.245824e-02 2.043254e-02 5.972939e-03 1.882014e-02 1.319156e-02
## 1872 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1873 -1.094705e-02 -2.070598e-02 7.809508e-03 3.015842e-03 1.709779e-02
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## 1875 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
## 1876 5.345159e-03 4.421237e-03 -6.723186e-03 -1.775350e-03 5.781218e-03
## 1877 -1.061790e-02 2.853883e-03 3.180818e-02 -5.809116e-02 1.888921e-02
## 1878 1.758320e-02 -6.217362e-03 -4.807352e-02 6.111548e-03 -3.374051e-03
## 1879 -2.707472e-02 -2.453820e-03 1.613543e-02 2.091872e-03 -2.984181e-03
## 1880 2.758373e-02 -9.430499e-04 -5.545748e-02 1.521017e-03 -1.224991e-02
## 1881 -3.373059e-02 1.047248e-03 -5.789516e-02 -6.182608e-02 -5.990408e-03
## 1882 -2.707472e-02 -2.453820e-03 1.613543e-02 2.091872e-03 -2.984181e-03
## 1883 -1.288043e-02 5.659221e-03 8.137808e-03 3.363657e-03 -1.378218e-02
## 1884 3.381885e-04 2.512806e-02 -2.592695e-03 1.333538e-02 -1.250805e-02
## 1885 -1.687083e-02 -4.106312e-03 6.384563e-03 1.068902e-02 1.063233e-02
## 1886 -2.314062e-02 -4.730182e-02 -2.043510e-02 3.187348e-02 -4.314163e-02
## 1887 -1.370408e-02 7.413108e-03 2.929189e-02 2.789077e-02 5.486214e-02
## 1888 -6.502087e-04 1.340910e-02 -5.326590e-04 5.626907e-03 -8.113568e-03
## 1889 1.112648e-03 1.877244e-02 -5.917003e-02 1.868798e-02 5.142955e-02
## 1890 9.694051e-03 3.107860e-02 1.118831e-02 1.226925e-02 -3.146436e-02
## 1891 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1892 -4.296763e-03 3.497952e-02 7.809983e-03 -2.439426e-02 -2.923332e-02
## 1893 6.183914e-03 1.714946e-02 -1.418427e-03 4.759461e-03 -1.581412e-02
## 1894 -5.006138e-03 -8.927545e-03 6.837202e-03 -1.118179e-02 -4.111769e-03
## 1895 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 1896 1.001220e-02 -1.519123e-02 -6.062273e-03 8.451562e-03 1.196794e-02
## 1897 -9.674394e-03 -3.944478e-02 -7.749537e-03 1.560880e-02 1.776467e-02
## 1898 4.773005e-03 9.209269e-03 -7.005168e-03 4.754299e-03 7.439174e-03
## 1899 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1900 -1.654168e-02 1.945355e-02 3.038323e-02 -5.041798e-02 1.242375e-02
## 1901 -5.245824e-02 2.043254e-02 5.972939e-03 1.882014e-02 1.319156e-02
## 1902 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
## 1903 -3.732007e-02 -7.281714e-03 -3.439861e-02 -5.835307e-02 -2.003324e-02
## 1904 1.764838e-02 -2.443606e-02 1.763887e-03 -8.733757e-03 3.701571e-03
## 1905 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1906 4.473351e-03 3.761680e-02 -5.310238e-02 2.583870e-02 4.236125e-02
## 1907 -1.827637e-02 2.491277e-02 8.300180e-03 -2.266315e-02 -2.484384e-02
## 1908 -2.771428e-02 -9.858974e-03 2.465185e-02 -3.037246e-03 -5.556141e-03
## 1909 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1910 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1911 -5.826060e-02 -7.655185e-03 1.801056e-02 1.321139e-02 2.087474e-02
## 1912 -3.965437e-02 1.764692e-02 -5.932011e-02 -5.415290e-02 -1.245586e-02
## 1913 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
## 1914 2.702888e-02 -6.145837e-03 -2.261568e-02 1.002504e-02 1.821943e-02
## 1915 -3.215380e-02 2.355888e-02 6.505437e-04 3.998536e-03 -5.358208e-03
## 1916 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
## 1917 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1918 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1919 4.319020e-02 -2.723936e-02 -1.769778e-02 -3.906943e-02 5.344007e-03

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## 1920 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 1921 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1922 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1923 6.416712e-03 2.612115e-02 -4.448612e-02 -1.040789e-03 -3.034190e-02
## 1924 9.103428e-04 2.034003e-02 -2.310713e-03 6.805736e-03 -1.416601e-02
## 1925 1.761425e-02 -1.381830e-02 -5.960150e-03 4.999973e-03 1.153303e-02
## 1926 -1.687083e-02 -4.106312e-03 6.384563e-03 1.068902e-02 1.063233e-02
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## 1929 -4.389767e-02 2.237589e-03 7.844027e-03 1.012382e-02 1.883296e-02
## 1930 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1931 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1932 8.757506e-03 2.219253e-03 -7.417775e-02 -1.551920e-02 -3.965866e-02
## 1933 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1934 -1.576871e-02 4.220361e-03 2.912773e-02 2.238426e-02 5.402824e-02
## 1935 -3.152286e-02 -1.900790e-02 8.715628e-03 3.436340e-03 2.418264e-02
## 1936 3.822419e-02 -2.613414e-02 8.577670e-04 -9.154255e-03 -3.383284e-03
## 1937 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1938 2.064631e-03 3.192746e-03 1.641601e-04 5.506511e-03 8.339000e-04
## 1939 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1940 -4.802342e-02 4.513752e-03 1.560466e-03 1.023906e-02 3.313879e-02
## 1941 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1942 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 1943 6.944837e-02 -2.714240e-02 -1.933607e-03 -8.433362e-03 -1.846041e-02
## 1944 -6.552101e-03 5.185526e-02 3.229043e-02 -2.969058e-02 1.283259e-02
## 1945 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1946 1.253596e-02 -1.243972e-04 5.188220e-02 -1.034161e-02 -1.585399e-02
## 1947 -6.502087e-04 1.340910e-02 -5.326590e-04 5.626907e-03 -8.113568e-03
## 1948 1.008379e-02 -7.579420e-03 -1.367774e-02 8.722487e-03 1.939727e-02
## 1949 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
## 1950 -1.465574e-02 -1.226608e-02 -4.216024e-04 2.584992e-03 -1.340534e-02
## 1951 3.649775e-02 -4.198828e-03 -1.899089e-03 -1.325382e-03 -1.672524e-02
## 1952 -3.215380e-02 2.355888e-02 6.505437e-04 3.998536e-03 -5.358208e-03
## 1953 8.757044e-03 1.791719e-02 1.939360e-02 7.349560e-03 -2.280520e-02
## 1954 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
## 1955 -5.145878e-19 -3.708386e-19 9.011673e-19 3.396233e-20 -6.067963e-19
## 1956 8.358542e-20 6.258023e-20 -1.303207e-19 -8.789981e-21 8.214692e-20
## 1957 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1958 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1959 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1960 3.535010e-02 -1.967575e-02 -9.392687e-04 -3.170767e-03 -2.431237e-03
## 1961 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1962 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 1963 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 1964 4.242153e-02 -2.079850e-02 -4.741437e-04 -8.998564e-03 -1.025978e-02
## 1965 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1966 9.440044e-03 -1.040320e-02 -6.344256e-03 1.498121e-02 1.362590e-02
## 1967 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 1968 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
## 1969 1.196602e-02 -2.623110e-02 -1.490640e-02 -3.979032e-02 2.042113e-02
## 1970 1.398590e-02 3.842150e-03 8.102897e-03 3.960906e-03 -2.593004e-03
## 1971 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1972 3.978474e-02 -1.920321e-02 -9.202866e-04 -7.975426e-03 -9.435724e-03
## 1973 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06

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## 1974 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1975 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1976 -2.230225e-02 2.363340e-02 -1.850735e-03 8.249371e-03 -6.257096e-03
## 1977 -4.653446e-02 3.832874e-03 7.397884e-03 1.114696e-02 1.965702e-02
## 1978 2.368058e-03 -7.265318e-02 -1.359704e-02 3.531042e-02 3.674339e-02
## 1979 -3.581690e-02 1.167943e-03 1.665227e-02 7.214917e-03 3.966053e-03
## 1980 6.386680e-04 -4.100291e-02 1.638827e-02 9.567547e-04 1.141028e-03
## 1981 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 1982 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1983 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
## 1984 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1985 -2.230225e-02 2.363340e-02 -1.850735e-03 8.249371e-03 -6.257096e-03
## 1986 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 1987 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
## 1988 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1989 3.386096e-02 -2.603542e-03 -2.345231e-03 -3.022442e-04 -1.590118e-02
## 1990 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 1991 6.863840e-03 -5.241486e-03 9.075533e-03 -6.037804e-03 3.148351e-03
## 1992 -3.373059e-02 1.047248e-03 -5.789516e-02 -6.182608e-02 -5.990408e-03
## 1993 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
## 1994 7.338202e-03 2.174939e-06 1.056446e-03 3.460236e-03 -8.142130e-04
## 1995 6.042239e-03 -9.631434e-03 -1.633135e-02 -3.211714e-02 1.395567e-02
## 1996 1.672263e-02 -1.811666e-02 -1.436555e-02 2.841002e-03 1.524847e-02
## 1997 4.818224e-02 -1.182015e-02 1.413645e-02 1.183276e-03 1.150252e-02
## 1998 5.017823e-03 -1.123581e-02 9.301697e-03 -9.692655e-03 -4.729484e-03
## 1999 4.517127e-02 -2.560709e-03 -1.148222e-02 -3.614328e-02 3.015362e-02
## 2000 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2001 -1.966547e-02 2.203811e-02 -1.404592e-03 7.226234e-03 -7.081153e-03
## 2002 -3.373059e-02 1.047248e-03 -5.789516e-02 -6.182608e-02 -5.990408e-03
## 2003 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2004 4.119367e-02 1.026347e-02 5.013289e-03 1.480368e-03 1.703185e-02
## 2005 5.273571e-03 -3.190571e-03 8.922858e-04 -2.046275e-03 -1.648113e-03
## 2006 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2007 2.321538e-03 -2.471154e-03 8.462253e-03 -1.052400e-02 -1.171605e-02
## 2008 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 2009 -2.501008e-02 7.389259e-04 1.629959e-02 7.598383e-03 -2.150281e-03
## 2010 -7.208150e-03 -1.397459e-02 3.099882e-02 1.368794e-02 5.966964e-02
## 2011 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2012 -6.395687e-04 -7.405153e-03 8.516415e-03 -5.129118e-03 -2.571960e-03
## 2013 9.103428e-04 2.034003e-02 -2.310713e-03 6.805736e-03 -1.416601e-02
## 2014 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
## 2015 -2.738996e-02 -3.329689e-03 2.415154e-02 -7.408994e-03 -1.387617e-02
## 2016 6.870013e-03 4.605775e-02 -4.910472e-02 -2.451527e-02 -2.873600e-02
## 2017 -1.081580e-02 8.851967e-03 8.301968e-03 8.870168e-03 -1.294828e-02
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## 2022 -5.786201e-04 2.102090e-02 -8.148131e-03 5.897832e-03 -6.842377e-04
## 2023 -9.654561e-04 1.253323e-02 7.483451e-03 -3.873960e-03 -1.900556e-02
## 2024 1.202345e-03 1.879018e-02 1.313408e-02 1.494784e-02 -1.783849e-02
## 2025 4.137898e-02 -3.012237e-03 2.092685e-02 -1.482107e-02 -2.947428e-03
## 2026 1.547616e-02 -1.230195e-02 -2.299663e-03 -3.228054e-02 4.770891e-03
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## 2030 -4.296763e-03 3.497952e-02 7.809983e-03 -2.439426e-02 -2.923332e-02
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## 2037 2.000529e-03 -1.184647e-02 7.469922e-03 3.767204e-02 7.860789e-02
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## 2051 -2.301938e-03 1.670354e-03 -1.515053e-03 -5.461605e-04 -7.059093e-04
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## 2192 2.895846e-02 3.205099e-02 -1.468212e-02 3.264819e-02 3.899579e-03
## 2193 2.708374e-03 6.016522e-03 -7.169329e-03 -7.522123e-04 6.605274e-03
## 2194 -1.696363e-02 -4.171649e-02 -2.901355e-02 2.804449e-02 -4.183848e-02
## 2195 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2196 -1.234435e-02 2.478920e-02 2.905132e-02 -5.026229e-02 5.547254e-03
## 2197 -1.061790e-02 2.853883e-03 3.180818e-02 -5.809116e-02 1.888921e-02
## 2198 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2199 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2200 2.689987e-02 -5.317635e-03 -4.543738e-02 3.836913e-02 3.374638e-02
## 2201 -1.583290e-19 -9.192886e-20 2.699979e-19 1.302785e-20 -1.768913e-19
## 2202 3.989762e-03 -1.473734e-02 1.645133e-02 -2.309117e-02 -1.209976e-02
## 2203 -1.726443e-03 2.193531e-02 -2.756856e-03 7.828873e-03 -1.334195e-02
## 2204 2.324306e-02 2.503407e-04 2.946295e-02 -5.839340e-02 2.988026e-03
## 2205 -5.464172e-03 -2.959669e-03 9.444930e-03 7.726634e-03 -4.824870e-03
## 2206 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2207 -3.091205e-02 -8.996226e-04 -1.585102e-02 -3.112045e-02 2.124889e-02
## 2208 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2209 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2210 6.146923e-03 1.233386e-02 1.305288e-02 6.486647e-03 -1.647430e-02
## 2211 -4.724578e-02 -4.540257e-03 -5.037316e-02 -6.145733e-02 -6.479348e-03
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## 2213 4.420480e-03 3.426918e-02 1.029603e-02 1.431552e-02 -2.981625e-02
## 2214 1.014019e-03 1.819084e-02 1.137408e-03 -2.042607e-02 -1.727522e-02
## 2215 -2.295900e-02 -3.272863e-02 -2.282302e-02 3.544675e-02 -5.573327e-02
## 2216 -3.893489e-03 9.844894e-03 -5.233283e-02 7.506192e-03 4.731778e-02
## 2217 3.046306e-02 1.015545e-02 -7.332346e-02 1.818902e-02 5.793293e-02
## 2218 9.103428e-04 2.034003e-02 -2.310713e-03 6.805736e-03 -1.416601e-02
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## 2222 1.023958e-02 -4.295790e-03 -1.766326e-02 -3.196145e-02 7.079178e-03
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## 2225 -4.344817e-02 -1.705705e-03 -5.080880e-02 -5.811919e-02 -1.479378e-02
## 2226 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
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## 2229 -4.982145e-02 1.883726e-02 6.419082e-03 1.779700e-02 1.236750e-02
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## 2233 -3.047215e-04 -7.330085e-03 7.447505e-03 -6.698416e-03 -4.101926e-03
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## 2237 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
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## 2239 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2240 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2241 2.074302e-03 -7.639202e-03 2.239714e-02 1.319932e-02 -2.382445e-03
## 2242 -2.815148e-02 -4.124094e-02 2.854752e-02 3.874528e-02 6.518763e-02
## 2243 -7.551471e-02 -8.343264e-03 -1.018978e-01 -1.211246e-01 -2.436731e-02

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## 2247 1.986577e-03 1.181381e-02 -8.651612e-05 4.603769e-03 -8.937625e-03
## 2248 9.103428e-04 2.034003e-02 -2.310713e-03 6.805736e-03 -1.416601e-02
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## 2250 -1.793903e-02 1.027981e-04 1.352263e-03 -6.026396e-04 6.260799e-03
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## 2252 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2253 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2254 -2.307792e-03 4.861031e-03 5.273386e-04 7.438052e-03 -2.188250e-03
## 2255 -2.595261e-03 1.595563e-02 1.356972e-02 1.160969e-02 -9.524061e-03
## 2256 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2257 -9.844935e-03 -1.237931e-02 3.055268e-02 1.471108e-02 6.049369e-02
## 2258 -5.594787e-03 1.986541e-02 -4.514633e-04 1.408810e-02 -9.477762e-03
## 2259 1.911241e-03 -1.655561e-02 2.936514e-03 1.720133e-02 7.967127e-03
## 2260 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2261 -4.372423e-03 1.668284e-03 3.631785e-04 1.931541e-03 -3.022150e-03
## 2262 4.138933e-03 -4.446456e-03 2.256130e-02 1.870583e-02 -1.548545e-03
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## 2272 -2.738996e-02 -3.329689e-03 2.415154e-02 -7.408994e-03 -1.387617e-02
## 2273 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
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## 2278 -1.344291e-02 -3.846952e-04 3.008880e-02 1.758611e-02 -1.534057e-02
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## 2283 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2284 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2285 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2286 3.978474e-02 -1.920321e-02 -9.202866e-04 -7.975426e-03 -9.435724e-03
## 2287 4.773005e-03 9.209269e-03 -7.005168e-03 4.754299e-03 7.439174e-03
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## 2313 -1.061790e-02 2.853883e-03 3.180818e-02 -5.809116e-02 1.888921e-02
## 2314 3.576449e-03 -1.049037e-02 4.451229e-02 3.292828e-02 -3.106933e-03
## 2315 -1.827637e-02 2.491277e-02 8.300180e-03 -2.266315e-02 -2.484384e-02
## 2316 -7.659418e-03 1.667267e-02 -6.156234e-04 8.581585e-03 -1.031166e-02
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## 2318 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2319 3.822419e-02 -2.613414e-02 8.577670e-04 -9.154255e-03 -3.383284e-03
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## 2359 -1.288043e-02 5.659221e-03 8.137808e-03 3.363657e-03 -1.378218e-02
## 2360 -1.061790e-02 2.853883e-03 3.180818e-02 -5.809116e-02 1.888921e-02
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## 2369 3.347915e-02 -4.680596e-03 1.901982e-02 -8.949209e-03 6.314804e-03
## 2370 5.273571e-03 -3.190571e-03 8.922858e-04 -2.046275e-03 -1.648113e-03
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## 2372 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
## 2373 -3.180101e-02 3.924407e-02 -4.996160e-02 -3.920293e-02 -2.031026e-02
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## 2383 8.211554e-03 1.552661e-02 1.321704e-02 1.199316e-02 -1.564040e-02
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## 2388 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
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## 2416 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
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## 2421 -2.387259e-02 7.303051e-03 6.317021e-02 -1.151592e-01 3.860247e-02
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## 2425 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 2548 -5.464172e-03 -2.959669e-03 9.444930e-03 7.726634e-03 -4.824870e-03
## 2549 -3.286994e-03 1.500438e-02 -9.788019e-04 6.650044e-03 -7.289512e-03
## 2550 -1.222363e-03 1.819713e-02 -8.146418e-04 1.215656e-02 -6.455612e-03
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## 2576 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
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## 2584 3.381885e-04 2.512806e-02 -2.592695e-03 1.333538e-02 -1.250805e-02
## 2585 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2586 -6.674362e-03 3.338639e-03 -1.151874e-03 1.385380e-03 -3.728059e-03
## 2587 3.649775e-02 -4.198828e-03 -1.899089e-03 -1.325382e-03 -1.672524e-02
## 2588 9.440044e-03 -1.040320e-02 -6.344256e-03 1.498121e-02 1.362590e-02
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## 2590 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
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## 2707 8.902267e-03 1.559476e-02 -6.676848e-03 1.576732e-02 9.106974e-03
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## 2720 4.197337e-03 5.335644e-03 -1.331911e-03 1.556916e-04 -6.876496e-03
## 2721 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2722 -9.593435e-03 -9.345161e-03 9.116610e-03 -3.286388e-03 -6.492670e-03
## 2723 2.636785e-03 -1.595286e-03 4.461429e-04 -1.023138e-03 -8.240565e-04
## 2724 7.311537e-03 7.180789e-03 6.951022e-03 5.346286e-03 -6.321063e-03
## 2725 -4.309031e-02 -1.579827e-02 -3.412829e-02 -6.674292e-02 -9.936271e-03
## 2726 -1.706933e-02 -1.504859e-03 5.637982e-02 -9.915483e-02 5.305242e-02
## 2727 4.637957e-03 4.421335e-02 7.642311e-04 2.187093e-02 -7.714574e-03
## 2728 5.814065e-03 2.036990e-02 -5.855973e-02 2.317135e-02 5.143940e-02
## 2729 2.526219e-02 1.528104e-03 -6.391973e-02 1.204502e-02 -5.338633e-04

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## 2731 -6.618301e-03 3.745068e-02 -6.522694e-04 -1.387025e-02 -1.751727e-02
## 2732 4.701416e-03 1.597461e-03 6.103030e-04 4.483373e-03 9.843528e-06
## 2733 8.767219e-03 5.059884e-02 1.092551e-03 3.288395e-02 -6.046774e-03
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## 2736 -4.319864e-03 -1.253573e-02 1.000890e-02 -5.332663e-03 -8.140783e-03
## 2737 6.834122e-03 3.740359e-03 -8.857678e-04 -8.674460e-04 -7.700553e-03
## 2738 -4.892018e-03 -7.747700e-03 9.726913e-03 1.196986e-03 -6.482826e-03
## 2739 1.077994e-02 2.590548e-03 -4.128312e-02 -9.892800e-03 -1.782400e-02
## 2740 1.920893e-02 -1.750513e-02 -1.416632e-05 -7.554928e-03 -2.350868e-03
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## 2742 -3.343611e-02 2.933296e-02 2.378126e-02 -2.780890e-02 -3.305140e-02
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## 2746 7.375413e-03 -1.359594e-02 -6.508416e-03 9.474700e-03 1.279200e-02
## 2747 -2.436634e-02 3.562702e-03 8.966106e-03 1.339660e-03 3.621093e-03
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## 2751 -2.197620e-02 -5.480646e-02 8.536402e-03 1.307463e-02 4.666724e-03
## 2752 -4.609731e-03 6.531385e-03 -9.877143e-04 6.891891e-03 -2.894159e-03
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## 2762 -8.859611e-03 -1.258970e-02 1.652061e-03 1.696903e-02 1.475615e-02
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## 2782 -9.844935e-03 -1.237931e-02 3.055268e-02 1.471108e-02 6.049369e-02
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## 2785	1.920893e-02	-1.750513e-02	-1.416632e-05	-7.554928e-03	-2.350868e-03
## 2786	2.708374e-03	6.016522e-03	-7.169329e-03	-7.522123e-04	6.605274e-03
## 2787	2.252744e-02	-3.649350e-03	-4.507420e-02	4.030067e-02	3.072423e-02
## 2788	5.345159e-03	4.421237e-03	-6.723186e-03	-1.775350e-03	5.781218e-03
## 2789	2.636785e-03	-1.595286e-03	4.461429e-04	-1.023138e-03	-8.240565e-04
## 2790	-3.338022e-04	5.758280e-04	8.158735e-03	-8.549121e-03	-1.285290e-02
## 2791	4.701416e-03	1.597461e-03	6.103030e-04	4.483373e-03	9.843528e-06
## 2792	-8.481683e-03	1.365844e-02	2.435687e-02	-5.231372e-02	2.715244e-02
## 2793	1.461126e-02	-1.890647e-03	1.850875e-04	-6.406267e-03	1.763186e-03
## 2794	5.017823e-03	-1.123581e-02	9.301697e-03	-9.692655e-03	-4.729484e-03
## 2795	-4.946189e-02	-1.890510e-02	1.006789e-02	2.833701e-03	3.044344e-02
## 2796	-9.593435e-03	-9.345161e-03	9.116610e-03	-3.286388e-03	-6.492670e-03
## 2797	3.386096e-02	-2.603542e-03	-2.345231e-03	-3.022442e-04	-1.590118e-02
## 2798	-1.439843e-02	-5.092359e-02	-2.095193e-02	2.675043e-02	-5.009187e-02
## 2799	1.144703e-02	1.537714e-02	1.163995e-02	2.488898e-03	-1.761511e-02
## 2800	4.611761e-02	-1.501289e-02	1.397229e-02	-4.323235e-03	1.066862e-02
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## 1	-6.195841e-02	5.277255e-04	3.521586e-02	-2.238648e-02	3.778891e-02
## 2	-2.822619e-02	6.553708e-03	2.014411e-02	9.284945e-03	1.202415e-02
## 3	4.475907e-03	-4.519718e-03	-1.497226e-02	-1.639795e-02	1.468370e-02
## 4	-4.008576e-03	1.990182e-02	8.269680e-03	-4.503323e-03	-6.785115e-03
## 5	-2.257449e-02	1.437254e-02	2.161868e-02	-3.984582e-03	1.547601e-02
## 6	1.599513e-02	1.112615e-02	-2.365813e-03	8.144364e-03	-8.013768e-03
## 7	3.577166e-02	5.991881e-02	4.250141e-02	3.576370e-02	6.554705e-03
## 8	1.664080e-03	-4.780985e-03	-1.021131e-02	-4.466025e-03	-7.757797e-03
## 9	4.552632e-03	-9.621692e-03	-8.765724e-03	-1.385478e-02	7.668094e-04
## 10	7.789392e-03	4.003092e-03	-4.738106e-03	2.676206e-03	4.735676e-03
## 11	-1.012266e-03	4.898705e-03	1.518623e-02	1.553346e-02	1.268140e-02
## 12	-8.508342e-03	1.404701e-02	-2.394024e-02	-5.627100e-03	-2.059778e-02
## 13	-2.603918e-03	-2.134785e-02	-5.242733e-02	6.844536e-03	2.443656e-04
## 14	-3.421670e-03	-1.657464e-04	-2.123260e-03	1.775113e-03	-4.172936e-03
## 15	1.298592e-02	-2.030036e-02	-2.709164e-02	-2.285642e-02	2.429194e-02
## 16	4.757880e-03	-1.248955e-03	-1.170391e-03	9.094620e-04	7.963143e-04
## 17	-2.662202e-02	-7.246232e-03	9.804685e-03	-1.800326e-02	1.255959e-02
## 18	-1.012266e-03	4.898705e-03	1.518623e-02	1.553346e-02	1.268140e-02
## 19	-1.956622e-03	8.552909e-03	-1.938286e-02	-3.379192e-03	-1.205419e-02
## 20	6.366073e-03	7.201830e-03	-4.393440e-03	-1.273659e-02	-5.083657e-03
## 21	-1.164937e-02	3.749006e-03	6.607104e-03	-7.457485e-04	-9.896906e-03
## 22	-8.356252e-03	9.252104e-02	1.211763e-02	-2.703646e-02	2.410254e-02
## 23	1.891496e-03	-3.352912e-02	-3.473989e-02	-3.344134e-03	1.214932e-02
## 24	-3.723019e-02	-1.944266e-02	3.378764e-02	-2.041827e-02	-1.636623e-02
## 25	7.558481e-03	-8.609139e-04	-1.176271e-02	-8.411536e-03	5.495360e-04
## 26	-7.554946e-03	2.100319e-02	-3.800114e-03	-6.164886e-03	-6.901247e-03
## 27	1.155338e-02	-8.880494e-03	8.242699e-03	2.085736e-03	5.434738e-03
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## 30	-1.043023e-02	5.319697e-02	-6.207218e-03	4.582835e-02	4.426809e-02
## 31	4.757880e-03	-1.248955e-03	-1.170391e-03	9.094620e-04	7.963143e-04
## 32	1.787657e-02	-9.204570e-03	-7.933603e-03	-6.127425e-03	2.378034e-03
## 33	4.757880e-03	-1.248955e-03	-1.170391e-03	9.094620e-04	7.963143e-04
## 34	4.757880e-03	-1.248955e-03	-1.170391e-03	9.094620e-04	7.963143e-04
## 35	5.504354e-02	-2.221953e-03	-1.175256e-02	4.667648e-02	9.295324e-02
## 36	-2.799037e-02	1.616023e-02	2.618427e-02	8.609934e-03	1.269265e-02

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## 39 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 92    6.052047e-03  4.805398e-04 -1.817618e-02 -2.147542e-02  2.181041e-02
## 93    1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03  1.581720e-03
## 94   -1.012266e-03  4.898705e-03  1.518623e-02  1.553346e-02  1.268140e-02
## 95   -2.372560e-02 -5.348962e-04  1.969253e-03  2.208181e-02 -4.367759e-03
## 96    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 97   -7.554946e-03  2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
## 98   -2.127779e-04  2.568715e-02  2.720786e-02  4.403624e-02 -1.170142e-02
## 99   -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 100   1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03  1.581720e-03
## 101   1.336209e-03 -1.414702e-03 -3.293651e-03  2.684575e-03 -3.376622e-03
## 102   -4.830007e-03  1.783241e-02  7.970714e-03  1.086416e-04 -2.067974e-03
## 103    2.425311e-02 -3.043639e-03 -2.450740e-02 -2.772387e-02  4.478659e-02
## 104    2.192035e-02 -8.851228e-03 -2.668755e-02 -1.989414e-02 -6.364009e-03
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## 106    1.855480e-02  4.070903e-03 -2.361172e-02 -2.388756e-02  1.049091e-03
## 107   -4.314875e-02 -2.890975e-02  3.243406e-02  9.026528e-03  4.802063e-03
## 108   -3.545638e-03 -6.251826e-02 -6.881000e-03  1.970797e-02  1.763294e-02
## 109   -5.302487e-05  2.449861e-02  9.294040e-04 -4.059048e-03 -6.224670e-03
## 110   -5.806442e-03  1.896242e-03 -4.574459e-03 -1.948393e-02 -8.116987e-03
## 111    4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02  7.668094e-04
## 112   -1.938851e-03 -1.103862e-02 -2.690449e-02 -2.768735e-02 -2.321427e-02
## 113    4.750811e-02  2.865108e-02  1.883770e-02 -3.833192e-02  1.363403e-02
## 114    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 115    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 116   -7.554946e-03  2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
## 117   -4.339360e-02 -3.867154e-03  3.339689e-02 -1.128918e-02  3.392326e-02
## 118   -8.969373e-03 -2.762042e-02  2.017875e-02 -2.074756e-02 -1.826342e-02
## 119    2.630692e-02 -7.331018e-03 -2.140431e-02  5.857342e-02 -5.864230e-02
## 120   -7.196945e-03 -2.960690e-02  1.591730e-03 -1.875931e-02 -1.164316e-03
## 121   -6.337634e-03 -5.877628e-02 -1.820764e-02  1.874378e-02  1.565382e-02
## 122    1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03  1.581720e-03
## 123   -3.421670e-03 -1.657464e-04 -2.123260e-03  1.775113e-03 -4.172936e-03
## 124    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 125    9.125833e-03  6.932223e-03 -1.704230e-02  2.769865e-02  2.934945e-02
## 126   -3.431215e-02 -1.292900e-02  3.119924e-02  4.488300e-03 -1.024528e-02
## 127   -2.613260e-02 -1.401221e-02  3.215211e-02  3.622648e-03 -5.276030e-03
## 128   -2.843061e-02  7.119834e-03  2.447032e-02 -2.952107e-03  1.167304e-02
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## 131    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 132   -3.332770e-02  7.616086e-03  7.910166e-03 -2.603632e-02 -1.953645e-02
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## 142   -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 143    4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 144   -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05

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## 146 -4.060806e-03 -3.572661e-02 1.401785e-02 -1.147955e-02 -2.228995e-02
## 147 -5.302487e-05 2.449861e-02 9.294040e-04 -4.059048e-03 -6.224670e-03
## 148 1.716247e-02 -7.602272e-03 -2.551716e-02 -2.080360e-02 -7.160323e-03
## 149 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 150 -2.795307e-02 6.999662e-02 -1.555412e-02 3.431666e-02 1.996297e-02
## 151 4.681307e-02 -1.637993e-02 1.632761e-02 2.657331e-02 6.895831e-02
## 152 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 153 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 154 9.697020e-03 -8.121361e-03 -8.886472e-03 -5.261774e-03 -2.591216e-03
## 155 -2.856982e-02 6.367131e-03 6.739775e-03 -2.512686e-02 -1.874014e-02
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## 158 -3.332770e-02 7.616086e-03 7.910166e-03 -2.603632e-02 -1.953645e-02
## 159 8.944573e-03 1.255567e-02 -1.049661e-02 3.477935e-02 3.353329e-02
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## 161 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 163 1.291344e-02 -1.632835e-02 -1.435854e-02 -2.180113e-02 1.552215e-03
## 164 -3.934860e-03 -7.847300e-03 3.027130e-03 -1.763022e-02 3.683278e-02
## 165 9.382993e-03 -1.484265e-02 -2.266921e-02 -1.400061e-02 2.430285e-02
## 166 2.148330e-02 1.707724e-03 -3.252430e-02 -2.378704e-02 -6.011475e-03
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## 168 -1.363835e-02 -2.573626e-02 3.567310e-02 -9.744713e-03 -1.181777e-02
## 169 1.620632e-02 1.038431e-02 -5.131836e-03 -1.103868e-02 1.710712e-02
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## 171 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
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## 176 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 177 -1.277510e-02 -1.790226e-02 3.987323e-02 -8.484452e-03 -9.801218e-03
## 178 -2.320198e-02 -6.083070e-02 5.828452e-02 -7.227414e-03 -2.700751e-02
## 179 -9.568784e-03 2.699652e-02 3.270186e-03 -5.877972e-03 -7.817299e-03
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## 182 3.984401e-02 -3.240162e-02 4.976054e-02 2.994274e-02 -1.051149e-02
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## 184 -2.401552e-02 4.194426e-02 -1.608516e-02 1.902921e-02 1.442064e-02
## 185 2.744041e-03 4.744374e-03 5.899909e-03 1.196376e-03 -1.197379e-04
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## 189 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 190 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 193 4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02 7.668094e-04
## 194 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
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## 210 -1.994737e-03  1.390849e-02  1.199381e-03 -4.790237e-03 -5.869062e-03
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## 228  1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03  1.581720e-03
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## 250 -5.042380e-03 -1.274823e-02 -2.582443e-02 -1.963135e-03  9.667783e-03
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## 254  1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03  1.581720e-03
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## 261 -9.658473e-03 -1.636041e-02  1.963966e-02 -7.413974e-03 -2.814810e-02
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## 625 4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02 7.668094e-04
## 626 5.033402e-02 1.312088e-02 6.377411e-02 1.406181e-02 -2.839001e-02
## 627 -5.425845e-03 5.835833e-03 1.067603e-02 1.098247e-02 -5.295264e-03
## 628 -8.652945e-03 6.193715e-02 -3.284293e-02 6.593990e-02 6.015073e-02
## 629 2.375614e-02 -2.194256e-02 -1.537497e-02 -1.704443e-02 4.193169e-02
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## 645 -5.889077e-03 8.188521e-03 3.419858e-03 7.557534e-04 1.277596e-02
## 646 -4.318160e-02 -7.671547e-03 5.668995e-02 1.286426e-03 -2.972942e-04
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## 648 4.075549e-02 4.380852e-02 2.120747e-02 -4.403162e-02 6.968649e-03
## 649 -9.568784e-03 2.699652e-02 3.270186e-03 -5.877972e-03 -7.817299e-03
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## 697 -7.229849e-03 -3.080779e-03 -5.296163e-03 -4.133314e-03 -4.191533e-03
## 698 -2.837789e-02 1.757072e-02 1.632753e-02 2.746633e-02 2.268528e-02
## 699 -1.967654e-02 -9.096597e-03 1.963566e-02 1.254262e-02 -3.725077e-03
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## 702 -1.938851e-03 -1.103862e-02 -2.690449e-02 -2.768735e-02 -2.321427e-02
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## 721 6.687438e-02 5.331012e-03 5.913416e-02 5.249806e-03 -2.263535e-02
## 722 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 752 -1.145461e-02 3.174630e-03 -3.448097e-03 2.570862e-03 -9.339517e-03
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## 776 -4.078525e-02 2.360740e-02 1.793942e-02 -1.589868e-02 -2.758209e-03
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## 789 -8.141553e-03 -4.572395e-03 1.483928e-02 7.677230e-03 -2.320962e-02
## 790 2.175429e-02 2.290674e-03 -1.263859e-02 7.242820e-02 -5.940911e-02
## 791 1.718866e-02 6.039915e-04 -2.409774e-02 -1.446979e-02 -2.487902e-02
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## 799 2.744041e-03 4.744374e-03 5.899909e-03 1.196376e-03 -1.197379e-04
## 800 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 801 -1.865046e-02 -3.652413e-02 -2.083736e-02 1.166944e-02 7.956259e-03
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## 804 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 805 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 806 7.789392e-03 4.003092e-03 -4.738106e-03 2.676206e-03 4.735676e-03
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## 808 -1.798403e-02 4.663219e-02 -2.339596e-02 2.347701e-02 3.077177e-02
## 809 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 810 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 811 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 812 -1.100073e-02 -2.843084e-02 -3.591012e-02 2.599608e-03 5.339179e-03
## 813 9.979904e-03 -4.706971e-03 -3.669795e-02 -3.054377e-02 2.889988e-03
## 814 4.660782e-02 -2.475266e-02 8.732276e-03 1.180907e-02 6.892880e-02
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## 819 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 863 -6.141443e-03 -3.018875e-02 -3.606472e-02 -2.548385e-03 6.982734e-03
## 864 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 865 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
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## 882 -2.565058e-19 -1.341097e-19 2.287762e-19 -1.366560e-19 -4.200633e-19
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## 918 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 919 2.763143e-03 1.265953e-02 2.898990e-05 -3.880775e-03 -5.072748e-03
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## 922 2.175429e-02 2.290674e-03 -1.263859e-02 7.242820e-02 -5.940911e-02
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## 1153 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1155 -2.939248e-02 2.668213e-02 -4.482695e-02 3.425046e-02 4.552321e-02
## 1156 -8.023291e-04 5.845746e-03 -6.169885e-03 -4.651867e-04 -2.358699e-04
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## 1159 1.341041e-02 2.570573e-03 -2.349097e-02 -3.248057e-02 4.407117e-03
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## 1163 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 1164 1.277267e-02 1.653099e-02 -9.593534e-03 -2.296965e-03 -2.835506e-02
## 1165 -3.332770e-02 7.616086e-03 7.910166e-03 -2.603632e-02 -1.953645e-02
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## 1167 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1168 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1169 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1170 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04

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## 1178 -1.110058e-02 -4.151507e-02 -1.068111e-02 1.354308e-02 1.073169e-02
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## 1183 8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
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## 1186 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 1187 8.964488e-03 1.361596e-02 -1.276644e-02 -8.205392e-03 -2.837366e-02
## 1188 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1189 -8.410767e-03 -3.327581e-03 1.799939e-02 -1.232267e-03 2.214908e-02
## 1190 2.008769e-03 1.001893e-02 -7.141669e-04 -4.578150e-03 -3.209760e-03
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## 1209 -3.764194e-03 1.778876e-02 2.234619e-04 1.458596e-02 -2.967899e-02
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## 1238 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
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## 1256 -2.837789e-02 1.757072e-02 1.632753e-02 2.746633e-02 2.268528e-02
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## 1327 -2.393084e-02 -8.907633e-03 -5.626080e-03 7.317568e-03 -4.397264e-03
## 1328 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1329 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1330 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1331 -1.759752e-02 4.938147e-02 -2.234632e-02 3.116055e-02 2.661743e-02
## 1332 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03

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## 1335 -8.151742e-03 1.007251e-02 -2.605162e-03 4.461677e-02 -7.477262e-02
## 1336 -4.447314e-03 -3.847589e-02 1.296820e-02 -1.916309e-02 -1.813561e-02
## 1337 2.744041e-03 4.744374e-03 5.899909e-03 1.196376e-03 -1.197379e-04
## 1338 1.716247e-02 -7.602272e-03 -2.551716e-02 -2.080360e-02 -7.160323e-03
## 1339 -5.069619e-06 1.601226e-02 6.356133e-03 -4.291236e-03 -4.125812e-03
## 1340 4.238605e-03 -1.634298e-02 -2.254846e-02 -2.259361e-02 2.766088e-02
## 1341 7.789392e-03 4.003092e-03 -4.738106e-03 2.676206e-03 4.735676e-03
## 1342 -3.022092e-02 2.046220e-02 2.134349e-02 4.494708e-03 6.155092e-03
## 1343 -3.236838e-02 2.901000e-03 -6.239790e-03 1.272074e-02 8.734218e-03
## 1344 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1345 5.267011e-03 -1.023869e-02 -1.463374e-02 -1.332184e-02 -7.768706e-03
## 1346 6.036775e-04 2.032262e-02 -7.173616e-03 -2.590429e-04 -2.915906e-02
## 1347 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1348 -2.942574e-03 -5.198183e-03 6.123432e-02 4.166288e-02 1.015498e-01
## 1349 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
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## 1352 -1.235972e-02 2.661673e-02 1.959149e-02 1.236347e-02 -7.776796e-03
## 1353 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1354 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1355 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1356 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1357 3.583423e-03 2.203848e-03 -3.708212e-02 -1.506509e-02 2.767839e-03
## 1358 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 1359 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1361 8.162523e-03 -3.645647e-02 -3.783234e-03 -2.611191e-02 -2.606274e-02
## 1362 -5.109949e-02 -1.310278e-02 3.446946e-02 -3.036002e-02 -2.402708e-02
## 1363 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
## 1364 5.066189e-02 9.754597e-03 5.685645e-02 6.911206e-03 -3.277118e-02
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## 1366 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1367 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1368 7.650232e-04 1.363888e-02 -1.144948e-02 3.564500e-02 2.856404e-02
## 1369 6.610455e-03 5.088770e-03 -1.243966e-02 6.352700e-03 -2.797754e-02
## 1370 -5.042380e-03 -1.274823e-02 -2.582443e-02 -1.963135e-03 9.667783e-03
## 1371 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 1372 4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02 7.668094e-04
## 1373 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1375 -4.634803e-02 -1.192928e-02 3.675670e-02 -3.940989e-03 -1.598785e-02
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## 1382 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1389 -1.235972e-02 2.661673e-02 1.959149e-02 1.236347e-02 -7.776796e-03
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## 1392 7.348544e-03 -1.807954e-03 9.593413e-03 7.587108e-03 1.346681e-02
## 1393 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1395 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
## 1396 3.989923e-02 -1.432138e-02 -2.416890e-02 7.194829e-02 -4.801896e-02
## 1397 -3.798779e-02 5.466540e-02 -1.465368e-02 5.168037e-03 1.284655e-02
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## 1399 1.564038e-02 3.560487e-03 -2.134274e-02 -5.048867e-03 -7.791394e-03
## 1400 1.095922e-02 -2.925307e-04 -1.396582e-02 -3.415155e-03 -2.250460e-02
## 1401 2.763143e-03 1.265953e-02 2.898990e-05 -3.880775e-03 -5.072748e-03
## 1402 5.502832e-03 -6.321690e-04 -8.593579e-03 -1.399685e-02 -7.100206e-03
## 1403 -4.652017e-03 -4.011439e-02 -3.959407e-02 3.837933e-02 -5.259991e-02
## 1404 1.994085e-02 -1.453285e-02 -1.701087e-02 7.131001e-02 -5.355864e-02
## 1405 -1.686915e-02 2.075367e-02 -1.834741e-02 2.319249e-03 -2.138319e-02
## 1406 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
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## 1409 -5.302487e-05 2.449861e-02 9.294040e-04 -4.059048e-03 -6.224670e-03
## 1410 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1415 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1417 3.312793e-03 5.797131e-03 -1.424101e-02 5.064135e-03 -3.182552e-02
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## 1419 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 1422 4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02 7.668094e-04
## 1423 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 1424 6.687438e-02 5.331012e-03 5.913416e-02 5.249806e-03 -2.263535e-02
## 1425 4.761425e-02 -1.690212e-02 2.983265e-02 9.738308e-03 -1.723434e-02
## 1426 -4.810905e-03 2.574756e-02 2.099795e-03 -4.968510e-03 -7.020984e-03
## 1427 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1428 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1430 -9.444159e-03 -3.322545e-02 3.538020e-02 -1.009640e-03 -7.308777e-03
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## 1443 5.707859e-03 -4.427643e-03 -2.896526e-02 -1.823274e-02 -1.649984e-02
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## 1446 -1.242162e-02 -2.901995e-02 1.961067e-02 -3.533199e-03 -2.307535e-02
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## 1451 6.052047e-03 4.805398e-04 -1.817618e-02 -2.147542e-02 2.181041e-02
## 1452 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1453 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1485 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1503 -5.069619e-06 1.601226e-02 6.356133e-03 -4.291236e-03 -4.125812e-03
## 1504 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 1506 1.768563e-02 1.950292e-02 -3.323017e-02 -2.514923e-02 -2.202412e-02
## 1507 -1.283964e-02 4.813252e-02 -2.351671e-02 3.207001e-02 2.741375e-02
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## 1511 1.441286e-02 -6.226120e-03 -2.376900e-02 -2.942177e-02 2.259582e-02
## 1512 8.944573e-03 1.255567e-02 -1.049661e-02 3.477935e-02 3.353329e-02
## 1513 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1514 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1515 3.104180e-02 2.728081e-02 3.620612e-02 -4.176221e-02 3.113881e-02
## 1516 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1517 9.125833e-03 6.932223e-03 -1.704230e-02 2.769865e-02 2.934945e-02
## 1518 -1.145461e-02 3.174630e-03 -3.448097e-03 2.570862e-03 -9.339517e-03
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## 1537 2.763143e-03 1.265953e-02 2.898990e-05 -3.880775e-03 -5.072748e-03
## 1538 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
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## 1565 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
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## 1567 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1571 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 1586 4.475907e-03 -4.519718e-03 -1.497226e-02 -1.639795e-02 1.468370e-02
## 1587 -4.810905e-03 2.574756e-02 2.099795e-03 -4.968510e-03 -7.020984e-03
## 1588 -5.416407e-03 1.374274e-02 -9.238797e-04 -3.015124e-03 -1.004200e-02
## 1589 -1.242162e-02 -2.901995e-02 1.961067e-02 -3.533199e-03 -2.307535e-02
## 1590 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 1591 2.032736e-02 -1.178356e-02 -1.596123e-02 7.899355e-02 -5.771298e-02
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## 1593 -2.595833e-02 5.608813e-02 -1.675350e-02 3.910690e-02 2.583203e-02
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## 1595 -3.289777e-02 -2.389486e-02 3.742006e-02 4.741543e-03 -1.417989e-02
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## 1598 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1599 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
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## 1666 5.924385e-02 -1.452698e-02 -6.599738e-03 1.119406e-02 4.328298e-02
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## 1670 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1671 1.116447e-02 8.080206e-03 -6.370484e-03 1.134908e-02 -2.247509e-02
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## 1676 6.687438e-02 5.331012e-03 5.913416e-02 5.249806e-03 -2.263535e-02
## 1677 -1.117809e-02 6.563073e-03 -1.294978e-02 4.800534e-02 2.915462e-02
## 1678 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 1679 -2.354434e-02 -6.158347e-03 -4.576437e-03 1.500111e-02 -8.551604e-03
## 1680 1.007105e-02 -3.461233e-02 -3.378702e-02 -4.209785e-03 1.711857e-02
## 1681 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
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## 1684 9.110114e-03 1.194620e-02 1.506468e-03 -1.154021e-02 -5.203394e-03
## 1685 5.547915e-02 -2.783593e-02 4.511005e-03 8.482585e-03 6.588483e-02
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## 1687 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1688 -5.802915e-03 1.099346e-02 -1.973522e-03 -1.069866e-02 -5.887659e-03
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## 1693 -3.721261e-02 9.803027e-03 -1.469268e-03 -3.448792e-02 -5.638162e-03
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## 1706 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 1707 -2.562777e-02 1.296784e-02 1.177111e-02 1.381614e-02 -1.126585e-02
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## 1709 4.552632e-03 -9.621692e-03 -8.765724e-03 -1.385478e-02 7.668094e-04
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## 1713 2.660158e-02 -9.357046e-03 -4.298728e-02 -4.057275e-02 2.872857e-02
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## 1723 -2.372560e-02 -5.348962e-04 1.969253e-03 2.208181e-02 -4.367759e-03
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## 1727 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
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## 1799 -5.802915e-03 1.099346e-02 -1.973522e-03 -1.069866e-02 -5.887659e-03
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## 1804 9.382993e-03 -1.484265e-02 -2.266921e-02 -1.400061e-02 2.430285e-02
## 1805 -2.166368e-02 5.719187e-02 -2.518007e-02 2.978964e-02 4.469957e-02
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## 1813 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1815 -5.879640e-03 1.609543e-02 -8.180054e-03 -1.324184e-02 8.029229e-03
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## 1829 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 1833 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1834 5.375062e-02 2.929888e-02 7.225350e-02 7.995457e-03 -2.834288e-02
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## 1838 2.953887e-02 2.460505e-04 -5.264891e-02 -2.323750e-02 -3.488820e-02
## 1839 -3.348907e-20 -2.330573e-20 2.585065e-20 -1.201417e-20 -4.745298e-20
## 1840 -2.066864e-03 3.049194e-02 7.999703e-03 -3.772134e-03 -7.140722e-03
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## 1853 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1854 -1.950750e-05 7.661553e-03 -3.265969e-02 -6.209280e-03 2.778748e-03
## 1855 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1856 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
## 1857 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1858 -4.748399e-02 1.575543e-02 1.698741e-02 3.647029e-02 4.065056e-02
## 1859 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 1860 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1861 1.379692e-02 5.319858e-03 -2.244133e-02 -2.479702e-02 2.527769e-04
## 1862 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 1863 2.105405e-02 6.078603e-03 -4.737800e-02 -1.222747e-02 -3.599856e-02
## 1864 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 1865 1.672162e-02 -1.341332e-02 -1.118564e-02 -1.589270e-02 1.570812e-03
## 1866 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1867 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1868 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 1869 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1870 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 1871 -1.865046e-02 -3.652413e-02 -2.083736e-02 1.166944e-02 7.956259e-03
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## 1875 8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
## 1876 1.336209e-03 -1.414702e-03 -3.293651e-03 2.684575e-03 -3.376622e-03
## 1877 -2.372560e-02 -5.348962e-04 1.969253e-03 2.208181e-02 -4.367759e-03
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## 1880 3.197055e-02 -1.248778e-02 -1.479438e-02 7.726340e-02 -2.537863e-02
## 1881 4.408644e-02 2.848533e-02 1.671444e-02 -3.655680e-02 9.461090e-03
## 1882 3.865396e-03 5.474611e-03 -2.328026e-02 2.242321e-03 -1.111954e-02
## 1883 -5.802915e-03 1.099346e-02 -1.973522e-03 -1.069866e-02 -5.887659e-03
## 1884 8.058646e-04 1.429653e-02 -9.392935e-03 -1.411123e-02 -6.115841e-03
## 1885 -2.066430e-02 -3.053080e-02 -1.376706e-02 1.195635e-02 7.040207e-03
## 1886 1.116617e-02 -3.245572e-02 1.340573e-02 -1.725454e-02 -2.801486e-02
## 1887 6.012176e-02 2.048846e-02 6.150393e-02 -4.498931e-04 -2.930073e-02
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## 1889 -2.641677e-02 1.126504e-03 1.740002e-02 -3.239021e-03 1.258909e-02
## 1890 4.877388e-02 2.125354e-03 1.018671e-02 2.222735e-02 6.364969e-02
## 1891 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1892 -2.354194e-02 -1.457121e-02 4.291592e-02 1.030029e-02 7.394467e-03
## 1893 6.718694e-03 1.725632e-02 -7.311286e-03 -3.436500e-03 -4.512304e-03
## 1894 -1.597667e-02 1.403011e-02 3.762454e-03 9.863894e-04 -9.467332e-03
## 1895 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
## 1896 1.355954e-02 -2.144568e-03 -2.109473e-02 -1.194779e-02 -7.149415e-03
## 1897 -2.595833e-02 5.608813e-02 -1.675350e-02 3.910690e-02 2.583203e-02
## 1898 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 1899 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1900 -3.047821e-02 1.462255e-02 4.339025e-03 1.638211e-02 -1.103314e-02
## 1901 -1.865046e-02 -3.652413e-02 -2.083736e-02 1.166944e-02 7.956259e-03
## 1902 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 1903 5.370945e-02 2.960750e-02 6.042274e-03 -4.265654e-02 -9.666885e-03
## 1904 7.549876e-03 -4.990933e-03 1.015625e-02 1.873650e-03 2.775435e-03
## 1905 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 1906 -2.676279e-02 2.561311e-02 1.456970e-02 1.500901e-03 -1.734769e-02
## 1907 -3.469866e-02 -1.567829e-02 3.014960e-02 -3.195241e-03 -6.090940e-03
## 1908 4.406485e-03 1.033179e-02 -2.346388e-02 -8.577066e-03 -1.430993e-02
## 1909 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1910 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1911 -6.542882e-03 -6.714902e-02 -2.580297e-02 3.979545e-03 1.562431e-02
## 1912 3.733382e-02 4.364277e-02 1.908421e-02 -4.225650e-02 2.795713e-03
## 1913 8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
## 1914 -1.229567e-02 -1.140640e-03 8.619951e-03 -9.683868e-03 3.604737e-02
## 1915 -1.029966e-02 -4.331963e-03 -2.131167e-02 -1.974100e-02 -2.399968e-02
## 1916 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 1917 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1918 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1919 -1.261643e-02 3.398022e-04 -2.375362e-02 -3.050870e-03 7.719547e-03
## 1920 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 1921 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 1922 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1923 1.619408e-02 9.385375e-03 -1.763808e-02 7.105355e-02 -6.044129e-02
## 1924 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
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## 1929 -7.139963e-03 -5.293053e-02 -2.437752e-02  1.827860e-02  1.541795e-02
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## 1932  5.205069e-02 -3.285732e-02 -3.644166e-02  1.405821e-01 -1.063133e-01
## 1933  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 1934  5.176095e-02  2.719512e-02  6.709675e-02  7.496456e-03 -3.008613e-02
## 1935 -9.105847e-03 -5.542356e-02 -1.188049e-02  1.833332e-02  1.660076e-02
## 1936  2.744041e-03  4.744374e-03  5.899909e-03  1.196376e-03 -1.197379e-04
## 1937 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 1938  8.360810e-03 -6.706660e-03 -5.592821e-03 -7.946349e-03  7.854058e-04
## 1939  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 1940 -1.451718e-02 -5.769307e-02 -1.916051e-02  1.960943e-02  1.068457e-02
## 1941  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
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## 1943 -1.158262e-02  3.298985e-02  1.034049e-02 -5.591058e-03 -8.733351e-03
## 1944 -1.935764e-02  7.646282e-03 -1.390265e-02  4.887100e-02  2.418537e-02
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## 1947  2.763143e-03  1.265953e-02  2.898990e-05 -3.880775e-03 -5.072748e-03
## 1948  5.379988e-03 -1.061359e-03 -2.204760e-02 -1.108214e-02 -1.211867e-02
## 1949 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 1950 -4.763248e-02  6.140221e-02  1.515354e-02  3.793094e-02  2.279923e-02
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## 1954  6.366073e-03  7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 1955 -1.037813e-18 -6.727622e-19  9.153235e-19 -5.177590e-19 -1.555672e-18
## 1956  1.616608e-19  1.081364e-19 -1.384299e-19  8.190169e-20  2.467710e-19
## 1957  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 1958 -1.994737e-03  1.390849e-02  1.199381e-03 -4.790237e-03 -5.869062e-03
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## 1965  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 1966  1.716247e-02 -7.602272e-03 -2.551716e-02 -2.080360e-02 -7.160323e-03
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## 1969  1.710236e-03 -2.790567e-02 -2.819420e-02  3.736564e-03  1.633316e-02
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## 1971  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
## 1972 -2.816168e-03  1.183908e-02  9.004141e-04 -1.782726e-04 -1.151922e-03
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## 1974  4.757880e-03 -1.248955e-03 -1.170391e-03  9.094620e-04  7.963143e-04
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## 1976 -2.749111e-03  1.126788e-02  4.562239e-04 -5.487612e-03 -4.006074e-03
## 1977 -1.189784e-02 -5.168158e-02 -2.320713e-02  1.736913e-02  1.462164e-02
## 1978 -4.933341e-03  5.446265e-02 -5.447892e-02  1.161728e-02  1.411351e-02
## 1979  1.629617e-02  7.327558e-03 -4.620761e-02 -1.313693e-02 -3.679488e-02
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## 1983 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 1984 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1985 -2.749111e-03 1.126788e-02 4.562239e-04 -5.487612e-03 -4.006074e-03
## 1986 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 1987 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 1988 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1989 -9.568784e-03 2.699652e-02 3.270186e-03 -5.877972e-03 -7.817299e-03
## 1990 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 1991 5.436110e-03 1.202652e-02 -1.684851e-02 -1.685068e-02 -5.326290e-04
## 1992 4.408644e-02 2.848533e-02 1.671444e-02 -3.655680e-02 9.461090e-03
## 1993 8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
## 1994 1.787657e-02 -9.204570e-03 -7.933603e-03 -6.127425e-03 2.378034e-03
## 1995 -5.042380e-03 -1.274823e-02 -2.582443e-02 -1.963135e-03 9.667783e-03
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## 1997 7.150257e-03 -3.155777e-02 1.140300e-02 -1.057845e-02 -1.338133e-02
## 1998 -1.221895e-02 -6.242613e-03 1.482648e-02 -7.140694e-03 2.213048e-02
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## 2001 2.008769e-03 1.001893e-02 -7.141669e-04 -4.578150e-03 -3.209760e-03
## 2002 4.408644e-02 2.848533e-02 1.671444e-02 -3.655680e-02 9.461090e-03
## 2003 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2004 -4.060806e-03 -3.572661e-02 1.401785e-02 -1.147955e-02 -2.228995e-02
## 2005 9.515760e-03 -2.497911e-03 -2.340782e-03 1.818924e-03 1.592629e-03
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## 2007 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
## 2008 -3.421670e-03 -1.657464e-04 -2.123260e-03 1.775113e-03 -4.172936e-03
## 2009 1.222621e-02 -1.232048e-03 -2.887308e-02 -5.704028e-03 -1.033414e-02
## 2010 6.327145e-02 1.078872e-02 6.355659e-02 1.410562e-02 -2.262444e-02
## 2011 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 2013 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
## 2014 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 2015 -1.904750e-03 1.162227e-02 -6.923634e-03 1.686632e-02 7.655467e-04
## 2016 2.555565e-03 -3.250243e-02 1.059806e-02 7.466985e-02 -6.220360e-02
## 2017 2.557895e-03 4.286797e-03 -7.566343e-03 -1.864501e-02 -5.102253e-03
## 2018 2.038621e-04 -4.240391e-03 -7.239565e-03 -4.086921e-03 -4.706130e-03
## 2019 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2020 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 2021 -6.022488e-03 -3.305971e-02 3.750346e-02 -2.784753e-03 -3.135841e-03
## 2022 -5.416407e-03 1.374274e-02 -9.238797e-04 -3.015124e-03 -1.004200e-02
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## 2025 -5.254332e-03 -2.520445e-02 3.574977e-02 1.113461e-02 -5.424697e-03
## 2026 4.376543e-02 -4.303664e-02 -1.069620e-02 2.940041e-02 8.449515e-02
## 2027 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 2028 8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
## 2029 -7.769806e-03 4.373882e-03 -1.875887e-02 -1.690320e-02 2.779658e-02
## 2030 -2.354194e-02 -1.457121e-02 4.291592e-02 1.030029e-02 7.394467e-03
## 2031 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2032 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
## 2033 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2034 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03

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## 2035 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2036 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 2037 5.823160e-02 8.766908e-03 5.092512e-02 -4.111257e-03 -9.533372e-03
## 2038 1.095922e-02 -2.925307e-04 -1.396582e-02 -3.415155e-03 -2.250460e-02
## 2039 9.641080e-02 -1.494181e-02 1.211136e-01 3.811647e-02 -3.770245e-02
## 2040 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 2041 -8.156948e-03 2.466269e-03 -1.646744e-03 3.859428e-03 -5.491536e-03
## 2042 1.342396e-02 -1.270496e-02 -1.298699e-02 -1.718126e-02 -2.277169e-03
## 2043 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 2044 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2045 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 2046 1.121394e-02 3.666657e-03 -1.368685e-02 9.829430e-03 2.347267e-03
## 2047 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 2048 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 2049 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2050 5.517388e-02 -2.308658e-02 1.073479e-02 1.862696e-02 6.974372e-02
## 2051 -8.156948e-03 2.466269e-03 -1.646744e-03 3.859428e-03 -5.491536e-03
## 2052 1.994085e-02 -1.453285e-02 -1.701087e-02 7.131001e-02 -5.355864e-02
## 2053 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
## 2054 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
## 2055 1.559208e-02 -9.151547e-03 -1.548471e-02 8.107786e-02 -5.903158e-02
## 2056 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2057 -1.466527e-02 -2.962381e-02 2.929442e-02 -1.214582e-02 9.966136e-03
## 2058 8.729766e-04 9.379858e-04 -1.054983e-02 -7.542139e-03 1.469461e-02
## 2059 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2060 5.851357e-02 1.203767e-02 6.472698e-02 1.319615e-02 -2.342076e-02
## 2061 -2.066864e-03 3.049194e-02 7.999703e-03 -3.772134e-03 -7.140722e-03
## 2062 -5.690796e-02 -8.152525e-02 -2.194127e-02 2.888699e-03 7.330508e-03
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## 2064 -1.865046e-02 -3.652413e-02 -2.083736e-02 1.166944e-02 7.956259e-03
## 2065 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
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## 2068 -2.065648e-02 5.566020e-03 1.421277e-02 -1.737519e-03 3.526196e-02
## 2069 6.021175e-02 1.820224e-02 5.338092e-02 2.120666e-02 -2.266612e-02
## 2070 -3.229165e-02 -2.200973e-03 -3.325883e-05 1.526392e-02 -5.182670e-03
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## 2072 -3.047821e-02 1.462255e-02 4.339025e-03 1.638211e-02 -1.103314e-02
## 2073 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
## 2074 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2075 1.716247e-02 -7.602272e-03 -2.551716e-02 -2.080360e-02 -7.160323e-03
## 2076 2.850691e-02 -1.286677e-02 -1.500836e-02 7.812790e-02 -5.274373e-02
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## 2085 -2.816168e-03 1.183908e-02 9.004141e-04 -1.782726e-04 -1.151922e-03
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## 2087 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
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## 2090 -3.532244e-02 2.152458e-02 9.109547e-03 -3.082656e-02 -2.540552e-02
## 2091 1.941712e-03 1.059012e-02 -2.699767e-04 7.311894e-04 -3.556077e-04
## 2092 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 2093 -1.996071e-02 6.042117e-03 4.883563e-03 5.680947e-03 1.414005e-02
## 2094 7.332098e-02 2.380087e-02 4.077898e-02 -1.374741e-02 -5.001450e-02
## 2095 3.211695e-02 -2.864922e-02 -2.096779e-02 -2.499078e-02 4.271710e-02
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## 2097 -3.297661e-03 7.083607e-04 -1.801353e-03 -1.288565e-03 -3.847981e-03
## 2098 2.194654e-02 -6.449638e-04 -2.526813e-02 -1.356033e-02 -2.408270e-02
## 2099 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2100 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2101 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 2102 7.348544e-03 -1.807954e-03 9.593413e-03 7.587108e-03 1.346681e-02
## 2103 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2104 -1.865046e-02 -3.652413e-02 -2.083736e-02 1.166944e-02 7.956259e-03
## 2105 4.939140e-03 -6.872406e-03 -7.716081e-03 -6.171236e-03 -3.387530e-03
## 2106 -1.805596e-02 -5.580155e-03 1.180720e-02 -1.118537e-02 1.337450e-02
## 2107 8.944573e-03 1.255567e-02 -1.049661e-02 3.477935e-02 3.353329e-02
## 2108 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 2109 1.952528e-02 1.373546e-03 -1.196331e-02 3.402734e-03 -2.168969e-02
## 2110 7.348544e-03 -1.807954e-03 9.593413e-03 7.587108e-03 1.346681e-02
## 2111 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 2117 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2118 3.269360e-02 9.378582e-04 -2.433458e-02 1.119978e-01 -2.000675e-02
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## 2121 -4.810905e-03 2.574756e-02 2.099795e-03 -4.968510e-03 -7.020984e-03
## 2122 -1.029966e-02 -4.331963e-03 -2.131167e-02 -1.974100e-02 -2.399968e-02
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## 2125 9.515760e-03 -2.497911e-03 -2.340782e-03 1.818924e-03 1.592629e-03
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## 2131 2.868817e-02 -1.849022e-02 -2.155405e-02 7.104720e-02 -5.692757e-02
## 2132 1.960814e-03 1.850528e-02 -6.140895e-03 -4.345962e-03 -5.308618e-03
## 2133 -2.641457e-02 -1.728297e-02 1.835025e-02 -1.368476e-02 8.611354e-03
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## 2135 5.063149e-03 -5.998299e-03 -7.394174e-03 -9.234914e-03 -3.062575e-03
## 2136 -9.568784e-03 2.699652e-02 3.270186e-03 -5.877972e-03 -7.817299e-03
## 2137 3.269360e-02 9.378582e-04 -2.433458e-02 1.119978e-01 -2.000675e-02
## 2138 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 2156 -3.332770e-02 7.616086e-03 7.910166e-03 -2.603632e-02 -1.953645e-02
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## 2158 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
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## 2184 2.338322e-03 -3.976637e-02 3.191064e-02 -1.073110e-02 -2.350435e-03
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## 2188 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 2189 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
## 2190 7.348544e-03 -1.807954e-03 9.593413e-03 7.587108e-03 1.346681e-02
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## 2192 -8.108977e-03 1.266399e-02 -7.062661e-04 2.418602e-02 6.878435e-02
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## 2194 -1.420204e-02 -3.197650e-02 3.655059e-02 -1.919102e-03 -8.105092e-03
## 2195 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 2204 -3.329438e-02 2.646162e-02 5.239439e-03 1.620383e-02 -1.218506e-02
## 2205 1.291344e-02 -1.632835e-02 -1.435854e-02 -2.180113e-02 1.552215e-03
## 2206 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2207 3.766961e-03 -2.637310e-02 -2.348164e-02 -1.073775e-03 1.522226e-02
## 2208 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2209 1.311869e-02 -7.955615e-03 -6.763212e-03 -7.036887e-03 1.581720e-03
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## 2211 5.157808e-02 3.721068e-02 1.503175e-03 -4.576482e-02 -1.282671e-02
## 2212 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2213 3.925812e-02 4.623265e-03 1.252750e-02 2.040842e-02 6.205706e-02
## 2214 -2.310109e-02 -8.760162e-03 2.858440e-02 5.389392e-03 -1.336668e-03
## 2215 -1.277510e-02 -1.790226e-02 3.987323e-02 -8.484452e-03 -9.801218e-03
## 2216 -4.239344e-02 1.515661e-02 2.116247e-02 -2.252632e-03 3.121761e-03
## 2217 -3.972471e-02 4.884570e-03 4.120620e-02 2.610569e-03 6.131787e-02
## 2218 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
## 2219 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2220 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
## 2221 -5.812353e-03 3.086548e-03 9.626389e-03 3.298928e-03 -1.140924e-03
## 2222 -5.844710e-03 -6.902483e-03 -3.199431e-02 -2.428322e-03 9.431914e-03
## 2223 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
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## 2225 3.945257e-02 3.060839e-02 1.820674e-02 -4.052995e-02 8.989731e-03
## 2226 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 2227 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2228 -3.093799e-03 -3.532030e-03 -9.040918e-03 -5.375487e-03 -8.554111e-03
## 2229 -1.389258e-02 -3.777309e-02 -2.200775e-02 1.257890e-02 8.752573e-03
## 2230 -8.156948e-03 2.466269e-03 -1.646744e-03 3.859428e-03 -5.491536e-03
## 2231 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
## 2232 -3.307940e-02 1.399773e-02 1.164677e-02 1.271783e-02 1.255833e-02
## 2233 -2.857979e-03 6.074491e-03 -3.000758e-03 -6.050498e-03 -7.885612e-03
## 2234 6.310924e-02 -9.052367e-03 -2.988000e-02 1.343638e-02 3.216343e-02
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## 2237 -3.808178e-03 -2.915032e-03 -3.172903e-03 -5.908427e-03 -1.859640e-05
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## 2249 -3.604316e-03 -7.155423e-03 -1.041247e-02 -9.995348e-03 -4.724727e-03
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## 2258 3.068412e-03 7.910190e-03 -6.194793e-03 -1.402515e-02 -8.931637e-03
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## 2266 5.851357e-02 1.203767e-02 6.472698e-02 1.319615e-02 -2.342076e-02
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## 2288 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 2289 -1.549755e-02 -1.958630e-02 -2.395200e-02 -1.684079e-03 1.912787e-02
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## 2327 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 2332 -2.372560e-02 -5.348962e-04 1.969253e-03 2.208181e-02 -4.367759e-03
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## 2335 6.366073e-03 7.201830e-03 -4.393440e-03 -1.273659e-02 -5.083657e-03
## 2336 -1.060259e-02 -5.653528e-03 -3.082392e-02 -3.337784e-03 8.635599e-03
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## 2339 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 2350 3.640647e-03 2.072893e-02 7.707775e-02 -4.859795e-02 -5.753532e-02
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## 2378 -3.421670e-03 -1.657464e-04 -2.123260e-03  1.775113e-03 -4.172936e-03
## 2379 -3.884903e-03  2.186941e-03 -9.379434e-03 -8.451601e-03  1.389829e-02
## 2380 -3.352586e-02 -1.203417e-02 -2.268478e-02  1.920921e-02  4.503710e-03
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## 2383  5.517388e-02 -2.308658e-02  1.073479e-02  1.862696e-02  6.974372e-02
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## 2409 -6.022488e-03 -3.305971e-02  3.750346e-02 -2.784753e-03 -3.135841e-03
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## 2416  8.801658e-03 -8.956129e-04 -1.992434e-02 -1.285725e-02 -7.945729e-03
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## 2477 4.757880e-03 -1.248955e-03 -1.170391e-03 9.094620e-04 7.963143e-04
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## 2479 -1.678734e-02 -1.737826e-04 3.270215e-03 -3.484832e-02 -1.378180e-02
## 2480 -2.514815e-02 6.532877e-03 8.863036e-03 -2.690197e-02 -1.456720e-02
## 2481 4.475907e-03 -4.519718e-03 -1.497226e-02 -1.639795e-02 1.468370e-02
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## 2484 -2.797066e-03 1.975423e-02 -4.970505e-03 -5.255424e-03 -6.104932e-03
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## 2487 1.055277e-02 2.100646e-02 -1.371966e-02 2.113330e-02 2.765332e-02
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## 2502 -2.354892e-02 6.115258e-02 5.559935e-04 5.286524e-02 4.268637e-02
## 2503 -5.879640e-03 1.609543e-02 -8.180054e-03 -1.324184e-02 8.029229e-03
## 2504 -1.994737e-03 1.390849e-02 1.199381e-03 -4.790237e-03 -5.869062e-03
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## 2724 8.070673e-03 4.548176e-03 -1.541140e-02 5.973597e-03 -3.102920e-02
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## 2731 -2.252967e-02 -1.946991e-02 2.772968e-02 -5.233163e-03 -5.286938e-03
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## 2744 -7.554946e-03 2.100319e-02 -3.800114e-03 -6.164886e-03 -6.901247e-03
## 2745 -1.012266e-03 4.898705e-03 1.518623e-02 1.553346e-02 1.268140e-02
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## 2753 5.063149e-03 -5.998299e-03 -7.394174e-03 -9.234914e-03 -3.062575e-03
## 2754 -7.092008e-03 -6.141689e-02 -1.895079e-02 1.804641e-02 1.751681e-02
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## 2800 -1.210553e-03 -2.485111e-02 1.699582e-02 -2.632106e-03 -1.416674e-02
##          X25          X26          X27          X28          X29
## 1      1.389492e-02 7.380413e-03 -3.377879e-02 3.515232e-02 -1.362456e-02
## 2      -1.484802e-03 1.813650e-02 -1.199848e-02 7.033284e-03 1.486295e-02
## 3      -3.873834e-03 -1.314108e-02 8.804965e-03 3.502548e-03 1.246531e-02
## 4      -8.567679e-03 1.569372e-04 1.162869e-02 4.960476e-03 3.431435e-02
## 5      2.678741e-04 1.251119e-02 -1.975722e-02 1.342817e-03 2.193979e-02
## 6      1.775341e-03 1.611985e-02 -5.587346e-03 -3.680994e-02 -1.514581e-02
## 7      4.827890e-03 5.498550e-03 1.098607e-02 -6.945862e-03 -2.040762e-02
## 8      -2.978836e-03 -6.808797e-03 5.229914e-03 -4.869936e-03 -8.829288e-03
## 9      -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
## 10     8.779318e-04 1.239196e-02 4.553214e-04 -7.831007e-03 2.528416e-02
## 11     4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 12     -1.131560e-02 1.549881e-02 1.555989e-02 -3.584991e-03 1.565177e-02
## 13     -2.629398e-02 2.930935e-03 2.012425e-02 -2.988208e-04 3.371989e-02
## 14     3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 15     5.798537e-02 8.431080e-02 2.911503e-02 3.362987e-03 1.401278e-02
## 16     1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 17     -1.747308e-03 -1.758509e-02 -1.720873e-04 1.055330e-02 1.298158e-03
## 18     4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 19     -2.746067e-02 -1.726622e-02 5.046105e-02 1.458617e-02 4.756898e-02
## 20     4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 21     9.448625e-03 3.597451e-03 -1.161340e-02 4.481382e-03 -3.938181e-02
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## 23     -1.948781e-02 5.326548e-03 -2.182423e-02 -1.779573e-02 3.151844e-02
## 24     -1.183019e-02 -3.382625e-02 4.035460e-02 -5.730284e-03 -2.664440e-02
## 25     2.583508e-03 -1.122771e-02 -2.278977e-02 -1.886004e-02 -2.449566e-02
## 26     6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
## 27     -2.877525e-03 -2.759768e-03 6.525903e-03 -2.757174e-03 -3.576585e-04
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## 30     1.813296e-02 2.784561e-03 -1.099517e-02 -5.832119e-02 -4.092261e-02
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## 58 5.067126e-03 -4.209105e-03 -2.086778e-02 -2.741985e-02 1.026145e-02
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## 113 -1.345337e-02 -1.776595e-03 2.097072e-02 -6.872753e-03 -2.962896e-02
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## 115 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 116 6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
## 117 8.194777e-04 3.369072e-03 -3.260066e-02 5.144335e-03 6.059546e-03
## 118 -3.080518e-02 -1.724664e-02 2.722178e-02 -1.985928e-02 -4.221602e-02
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## 130 -1.433278e-02 -1.301559e-02 8.330786e-03 3.340588e-03 4.179503e-02
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## 136 3.447226e-02 -5.576980e-02 2.319505e-02 2.424939e-02 4.439645e-02
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## 190  4.617264e-03  2.032513e-03  1.981615e-03  7.995126e-04  2.300901e-03
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## 634 -1.831154e-02 1.009657e-02 -2.350766e-03 6.135421e-03 6.150450e-03
## 635 -7.073890e-03 4.984669e-02 2.774406e-03 3.040381e-02 4.496103e-03
## 636 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 640 -2.245200e-04 -3.136712e-02 4.089855e-02 7.553038e-03 -4.266380e-02
## 641 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 642 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 643 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 644 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 645 1.346570e-03 1.999174e-02 -2.099926e-02 2.262152e-03 8.831669e-03
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## 647 -7.996799e-02 3.253607e-02 3.412142e-04 4.854463e-03 1.094399e-03
## 648 -1.046225e-02 1.727512e-03 2.632827e-02 -1.785025e-03 -9.920625e-03
## 649 -7.056922e-03 -7.079632e-03 4.039095e-03 3.412621e-03 2.874954e-02
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## 652 -3.664022e-03 -2.376242e-02 -4.955876e-02 1.085474e-01 2.054776e-02
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## 654 -8.451575e-02 3.023449e-02 -5.815418e-03 1.938162e-03 -2.962132e-02
## 655 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 656 -3.320448e-03 -1.062153e-02 2.062921e-02 1.652651e-02 1.398873e-02
## 657 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 658 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 659 3.831110e-02 -4.305843e-02 -1.207665e-02 7.527689e-03 2.316806e-02
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## 663 8.340687e-02 -1.079709e-01 4.582851e-02 3.652356e-02 6.138038e-02
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## 706 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 707 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 708 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
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## 712 1.256771e-02 -1.030799e-02 3.272895e-02 -2.400498e-03 -2.992504e-02
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## 718 4.762821e-02 7.657283e-02 5.729661e-02 3.244689e-02 1.221395e-03
## 719 6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
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## 729 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 757 -2.190803e-02 -2.542374e-02 5.511725e-02 -1.748629e-02 -3.113919e-02
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## 759 7.157144e-03 -1.191908e-02 -1.907731e-02 -1.709789e-02 2.598349e-02
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## 785 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
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## 787 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 798 -5.743172e-03 2.035867e-02 -2.404856e-03 1.034750e-02 -2.147714e-02
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## 809 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 810 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 811 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 812 -2.742189e-02 2.963670e-03 9.222986e-03 7.737861e-03 2.325219e-02
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## 814 3.090988e-02 -7.296084e-02 2.330137e-02 1.415963e-02 3.364563e-02
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## 817 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 822 -4.167960e-03 -7.211280e-03 1.715503e-02 1.775354e-02 1.582746e-02
## 823 -4.558292e-02 -2.721177e-02 3.044470e-02 3.619346e-02 -7.806353e-03
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## 983 -4.051588e-03 -2.817660e-03 2.043009e-02 1.244225e-02 1.010156e-02
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## 1002 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 1005 -5.430784e-03 -8.551225e-03 6.631636e-04 -8.755949e-04 1.134210e-02
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## 1007 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1008 -7.359557e-03 -4.915157e-03 3.012424e-02 4.472937e-03 6.780334e-04
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## 1011 -2.024186e-02 -8.955208e-03 1.368617e-02 7.573584e-03 6.076299e-02
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## 1023 -1.193921e-03 -1.506555e-02 1.165215e-02 2.357726e-02 2.821576e-03
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## 1136 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 1139 2.454316e-03 3.270065e-02 -5.234668e-02 -4.459920e-02 2.127282e-02
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## 1176 7.270883e-03 1.421117e-02 4.605967e-03 4.968080e-03 -6.094129e-03
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## 1333 -3.374938e-03 2.161229e-02 -4.696534e-03 4.528050e-03 2.512260e-02
## 1334 -1.155880e-02 -3.347169e-03 6.271143e-03 -1.272519e-04 1.460601e-02
## 1335 6.208865e-02 -2.188595e-03 7.551992e-03 2.868726e-02 7.021368e-03
## 1336 -3.308025e-02 -4.152621e-02 5.376791e-02 -8.094862e-03 -3.120418e-02
## 1337 -1.155880e-02 -3.347169e-03 6.271143e-03 -1.272519e-04 1.460601e-02
## 1338 -1.163724e-04 -4.393620e-03 -3.275058e-03 5.311292e-03 5.725898e-03
## 1339 -2.658592e-03 -3.903444e-03 6.273306e-03 7.274798e-04 1.534639e-02

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## 1340 4.762821e-02 7.657283e-02 5.729661e-02 3.244689e-02 1.221395e-03
## 1341 8.779318e-04 1.239196e-02 4.553214e-04 -7.831007e-03 2.528416e-02
## 1342 3.132461e-03 2.016902e-02 -1.001687e-02 7.832797e-03 1.716385e-02
## 1343 3.957090e-04 -1.980310e-02 1.904375e-02 2.256026e-02 1.230334e-02
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## 1345 -5.158361e-03 -7.856747e-03 -3.218397e-03 -1.360569e-02 7.054729e-03
## 1346 3.547077e-04 3.735685e-03 1.529570e-02 1.092035e-02 8.783369e-03
## 1347 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1348 3.946142e-02 -2.087514e-02 -1.999117e-02 2.285565e-02 3.991589e-02
## 1349 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 1350 -1.163724e-04 -4.393620e-03 -3.275058e-03 5.311292e-03 5.725898e-03
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## 1352 9.837668e-03 3.516533e-02 -2.782260e-02 -4.408827e-04 -1.332741e-03
## 1353 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1354 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1355 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1356 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1357 -1.285953e-02 -1.658464e-02 4.230513e-02 1.226370e-02 3.055078e-02
## 1358 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 1359 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1360 -3.480225e-03 -3.240912e-03 -1.002575e-02 -2.767411e-02 -1.918153e-02
## 1361 -2.572706e-02 -3.292481e-02 5.162736e-02 4.288131e-03 -3.883237e-02
## 1362 4.218602e-02 -1.997599e-02 -1.712717e-02 -2.691090e-03 -1.112373e-02
## 1363 6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
## 1364 -8.926817e-03 2.064671e-02 8.427561e-03 1.438686e-02 1.484305e-02
## 1365 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 1366 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1367 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1368 -8.159413e-02 3.400766e-02 3.717145e-03 9.142679e-03 1.850183e-02
## 1369 1.303804e-04 8.368688e-03 3.489914e-03 -1.142440e-03 5.445824e-04
## 1370 -1.831154e-02 1.009657e-02 -2.350766e-03 6.135421e-03 6.150450e-03
## 1371 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 1372 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
## 1373 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1374 -4.902776e-03 7.959138e-03 -3.356308e-02 -1.248066e-02 1.811547e-02
## 1375 8.119520e-03 -1.874020e-02 -4.933050e-03 2.887483e-02 -4.719207e-02
## 1376 -2.081736e-03 -1.527237e-03 7.740283e-03 4.729287e-03 -3.614663e-04
## 1377 -2.249179e-02 6.189983e-03 4.216803e-03 2.367117e-02 1.109887e-02
## 1378 2.287359e-03 2.097489e-02 -1.595866e-02 -1.154663e-02 -1.327927e-04
## 1379 8.900212e-03 -5.562741e-04 2.163468e-06 8.547317e-04 7.403767e-04
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## 1383 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1384 3.260458e-02 -7.895855e-03 -7.450175e-03 -1.102460e-02 -1.762827e-02
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## 1393 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02

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## 1394 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1395 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 1396 2.626410e-02 9.556023e-03 -1.354854e-02 7.451922e-04 2.717863e-02
## 1397 5.484438e-02 -1.707575e-02 -4.194848e-03 -4.026323e-02 -4.587000e-02
## 1398 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1399 4.059235e-04 -2.434014e-03 8.053385e-03 3.382899e-03 -1.333715e-02
## 1400 -4.815943e-03 -8.163720e-04 1.489843e-03 -2.903133e-03 4.959050e-03
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## 1404 1.902338e-02 -1.079187e-02 8.510112e-03 2.755243e-02 1.829538e-02
## 1405 -1.076221e-02 1.801835e-02 2.738413e-02 9.438977e-03 1.717519e-02
## 1406 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
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## 1408 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1409 -3.804645e-03 -1.002282e-02 -2.712767e-03 -5.163811e-03 -6.065331e-03
## 1410 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1411 -1.831154e-02 1.009657e-02 -2.350766e-03 6.135421e-03 6.150450e-03
## 1412 -4.454512e-02 -2.068510e-02 4.490242e-02 -5.794919e-03 -1.151641e-02
## 1413 1.022916e-02 2.687747e-03 4.168597e-05 7.335273e-03 -1.225530e-02
## 1414 -2.635122e-03 -4.046781e-03 -4.083959e-03 -8.294680e-03 -1.884884e-03
## 1415 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1416 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1417 -1.951355e-03 6.841451e-03 1.123020e-02 3.586846e-03 1.831161e-04
## 1418 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1419 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1420 -2.567903e-02 -1.162380e-02 1.838988e-02 -1.472680e-02 -4.168176e-02
## 1421 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1422 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
## 1423 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 1424 -3.249090e-03 2.199277e-02 -1.537846e-02 -2.343600e-03 -1.266595e-02
## 1425 -3.185562e-02 2.871077e-02 4.095180e-03 1.972277e-02 1.869260e-02
## 1426 -5.430784e-03 -8.551225e-03 6.631636e-04 -8.755949e-04 1.134210e-02
## 1427 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1428 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1429 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1430 -1.748799e-03 2.014070e-02 -8.072465e-03 2.398346e-04 7.715167e-03
## 1431 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
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## 1433 -8.544778e-03 1.082247e-02 2.540631e-02 -1.740511e-02 3.612032e-02
## 1434 -6.389936e-03 -1.045678e-02 -4.590678e-03 4.473778e-03 1.026673e-03
## 1435 4.158955e-21 -2.982931e-19 -2.314069e-19 -3.079539e-19 -4.800322e-20
## 1436 5.617053e-02 8.557672e-02 4.323095e-02 2.220640e-02 -3.106354e-02
## 1437 -1.392082e-01 6.267247e-02 3.506869e-02 6.312353e-02 -1.282904e-02
## 1438 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 1439 -1.223146e-03 -9.432707e-03 -2.692354e-02 -2.073664e-02 2.679062e-03
## 1440 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1441 2.795296e-02 1.811823e-02 -4.643243e-02 3.167237e-03 6.655851e-03
## 1442 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 1445 -1.680078e-02 2.860003e-03 -9.940360e-03 4.587566e-03 5.856389e-04
## 1446 -2.161632e-02 -2.874916e-02 4.923480e-02 -1.113083e-02 -1.536596e-02
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## 1452  1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 1462  8.611637e-03  1.814546e-03 -3.685994e-03 -9.308154e-03  3.149321e-02
## 1463  5.193654e-04 -6.510681e-03 -2.702441e-02 -3.033615e-02 -2.045427e-02
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## 1466 -4.051588e-03 -2.817660e-03  2.043009e-02  1.244225e-02  1.010156e-02
## 1467  2.685707e-02 -7.147382e-03  5.236942e-03 -2.843911e-02 -2.594083e-02
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## 1474 -6.898307e-03  6.918998e-04 -6.598383e-03 -2.069673e-03  4.396558e-03
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## 1481 -7.207891e-03 -7.150071e-03  1.657218e-02 -4.031932e-04 -8.957298e-04
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## 1485  1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 1491  6.519858e-02  7.097704e-02  2.172971e-02  1.751595e-02 -2.608242e-02
## 1492  7.485111e-03  2.099090e-02  1.747050e-02  2.354368e-02  1.631896e-02
## 1493  5.694165e-02  7.289818e-02  4.071141e-02  3.774445e-02 -4.879225e-02
## 1494 -8.152463e-02  3.373860e-02 -4.578723e-04  7.025890e-03 -9.912988e-03
## 1495  1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1496  4.617264e-03  2.032513e-03  1.981615e-03  7.995126e-04  2.300901e-03
## 1497  4.762575e-02  9.639919e-02  6.863726e-02  4.801291e-03  5.056778e-03
## 1498 -3.320448e-03 -1.062153e-02  2.062921e-02  1.652651e-02  1.398873e-02
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## 1503 -2.658592e-03 -3.903444e-03  6.273306e-03  7.274798e-04  1.534639e-02
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## 1518 -4.051588e-03 -2.817660e-03  2.043009e-02  1.244225e-02  1.010156e-02
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## 1520  1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1521  1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1522  1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1523  6.647993e-03  1.196069e-02 -3.043258e-03 -5.939099e-03  2.079727e-02
## 1524 -1.312758e-03  3.671901e-04  1.971774e-02  1.242960e-03  1.238286e-02
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## 1571 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 1581 1.167240e-02 4.091508e-03 5.612306e-03 2.457806e-03 4.744663e-03
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## 1599 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
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## 1606 -2.752047e-03 2.386278e-02 2.952690e-03 1.543523e-02 -1.768802e-03
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## 1625 -1.464517e-02 1.589431e-02 5.262766e-03 1.456368e-02 8.975786e-03
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## 1627 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 1630 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
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## 1639 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
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## 1647 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
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## 1679 7.157144e-03 -1.191908e-02 -1.907731e-02 -1.709789e-02 2.598349e-02
## 1680 -2.185605e-02 4.072922e-03 -1.953255e-02 -1.197627e-02 -1.508130e-02
## 1681 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
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## 1688 -2.298911e-03 -8.442970e-03 1.267135e-02 6.751779e-03 1.717840e-02
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## 1699 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 1728 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 1837 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 1854 -1.068000e-02 -1.553669e-02 5.075345e-02 2.099945e-02 1.466676e-02
## 1855 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1856 6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
## 1857 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1858 -1.306171e-01 4.994687e-02 5.018272e-03 4.009782e-02 -1.509723e-02
## 1859 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 1860 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1861 -4.005805e-04 -1.572879e-02 -8.402135e-02 8.216130e-02 1.451822e-02
## 1862 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 1863 -4.210286e-03 -4.327256e-03 1.851483e-02 -2.501416e-02 1.257369e-02
## 1864 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 1865 -1.106773e-03 -5.039087e-03 -2.364848e-02 -2.604793e-02 -3.046836e-03
## 1866 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1867 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1868 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
## 1869 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1870 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 1871 9.277761e-03 6.071582e-03 -1.088791e-02 -1.142908e-03 -7.908554e-03
## 1872 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1873 -6.898307e-03 6.918998e-04 -6.598383e-03 -2.069673e-03 4.396558e-03
## 1874 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1875 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 1876 5.620512e-03 -1.689561e-03 -9.043540e-03 -1.439588e-02 1.178487e-02
## 1877 5.342295e-03 -1.065316e-02 -4.961388e-03 1.745527e-03 -1.909283e-02
## 1878 2.582319e-02 -4.710010e-03 -5.454679e-03 2.691146e-02 9.143780e-03
## 1879 -7.359557e-03 -4.915157e-03 3.012424e-02 4.472937e-03 6.780334e-04

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## 1882 -7.359557e-03 -4.915157e-03 3.012424e-02 4.472937e-03 6.780334e-04
## 1883 -2.298911e-03 -8.442970e-03 1.267135e-02 6.751779e-03 1.717840e-02
## 1884 5.574633e-03 -7.723600e-03 -1.743222e-02 -1.377231e-02 -4.787328e-03
## 1885 -3.907182e-03 4.196006e-03 -1.240836e-03 3.018055e-03 2.410489e-02
## 1886 -2.593901e-03 2.094657e-02 -1.401426e-02 -1.913959e-02 -9.581480e-03
## 1887 -2.579653e-04 2.549688e-02 -1.002091e-02 2.744128e-03 7.042388e-03
## 1888 6.243402e-03 5.609197e-04 -1.394316e-03 -3.488703e-03 -1.510653e-02
## 1889 7.348393e-03 -6.061659e-03 -2.413510e-03 1.333678e-02 -2.946336e-02
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## 1892 5.474601e-03 -1.156790e-04 -2.392749e-02 -2.074905e-02 -6.176334e-03
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## 1894 -1.776518e-03 2.146192e-02 -6.116038e-03 6.778240e-04 -9.102759e-04
## 1895 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 1896 2.063153e-03 -3.345670e-03 5.173253e-03 1.404704e-02 -1.015812e-02
## 1897 2.061367e-02 -7.708302e-03 6.631258e-03 -2.495041e-02 -1.083430e-02
## 1898 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 1899 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1900 8.333421e-03 -7.149051e-03 3.961585e-04 6.833255e-03 6.155085e-04
## 1901 9.277761e-03 6.071582e-03 -1.088791e-02 -1.142908e-03 -7.908554e-03
## 1902 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 1903 -1.989545e-02 -1.121373e-03 2.583650e-02 -5.487671e-03 -7.262476e-03
## 1904 -8.786612e-03 1.300612e-03 1.188129e-02 1.475823e-03 1.861030e-02
## 1905 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 1906 1.299314e-02 9.621102e-03 5.568388e-03 2.259308e-02 -1.815005e-02
## 1907 -1.329105e-03 -2.233765e-02 6.680350e-03 2.439345e-02 -7.810266e-03
## 1908 -7.719609e-03 1.531764e-02 -5.058452e-04 -1.558617e-02 -1.221869e-02
## 1909 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1910 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1911 -4.319821e-03 -1.719388e-03 -6.414439e-03 -7.466266e-03 8.709436e-03
## 1912 -6.467872e-03 1.509544e-03 2.066066e-02 -1.189269e-02 1.927168e-02
## 1913 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 1914 -1.307049e-03 7.813089e-03 -2.362361e-02 -1.906415e-03 1.722670e-02
## 1915 -5.938036e-03 -2.659299e-02 4.080227e-02 2.006120e-02 -2.531765e-02
## 1916 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 1917 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1918 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1919 -2.998572e-02 9.844270e-04 -2.932861e-04 8.748529e-03 3.259909e-02
## 1920 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
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## 1935 -4.126115e-03 5.339682e-03 -9.882399e-04 -4.665982e-04 8.400845e-03
## 1936 -1.155880e-02 -3.347169e-03 6.271143e-03 -1.272519e-04 1.460601e-02
## 1937 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 1938 -5.533866e-04 -2.519544e-03 -1.182424e-02 -1.302397e-02 -1.523418e-03
## 1939 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1940 7.144114e-03 1.105767e-02 -1.094754e-02 -1.050223e-02 2.454766e-02
## 1941 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 1946 -3.175363e-02 -3.013907e-02 1.238491e-02 8.337595e-02 -3.669515e-02
## 1947 6.243402e-03 5.609197e-04 -1.394316e-03 -3.488703e-03 -1.510653e-02
## 1948 4.431388e-03 -2.092044e-03 2.881575e-03 8.227593e-03 3.644162e-02
## 1949 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
## 1950 2.770156e-02 -4.928033e-03 1.072642e-02 -3.433059e-03 -3.512930e-02
## 1951 -5.430784e-03 -8.551225e-03 6.631636e-04 -8.755949e-04 1.134210e-02
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## 1953 3.860761e-02 -5.207641e-02 4.411439e-02 3.355393e-02 4.590652e-03
## 1954 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 1955 1.716961e-20 -1.414322e-18 -1.192102e-18 -1.369347e-18 -1.726535e-19
## 1956 -2.669340e-21 2.218419e-19 1.755112e-19 2.083836e-19 2.949444e-20
## 1957 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1958 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1959 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1960 -1.570818e-02 -5.685542e-03 1.051264e-02 -1.150044e-03 4.095306e-02
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## 1962 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 1963 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 1964 -8.421909e-03 -1.205533e-02 -4.694383e-03 -5.963323e-03 -8.366232e-03
## 1965 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1966 -1.163724e-04 -4.393620e-03 -3.275058e-03 5.311292e-03 5.725898e-03
## 1967 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 1968 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 1969 -2.130266e-02 6.592466e-03 -7.708312e-03 1.047693e-03 -1.355789e-02
## 1970 3.726371e-03 8.187518e-03 -1.257582e-02 -1.314362e-02 -2.732588e-02
## 1971 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1972 -1.004805e-02 -1.058374e-02 -1.318452e-03 -1.675108e-03 9.041202e-03
## 1973 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1974 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1975 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1976 8.900212e-03 -5.562741e-04 2.163468e-06 8.547317e-04 7.403767e-04
## 1977 6.286636e-03 2.567476e-03 -1.624546e-02 -6.230637e-03 -2.761689e-02
## 1978 1.749332e-02 -1.123849e-02 2.939723e-02 2.182777e-02 -2.552797e-02
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## 1980 6.424751e-02 6.908249e-02 6.959548e-02 1.760414e-02 -3.880521e-02
## 1981 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 1982 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1983 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 1984 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1985 8.900212e-03 -5.562741e-04 2.163468e-06 8.547317e-04 7.403767e-04
## 1986 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 1987 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02

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## 1988 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1989 -7.056922e-03 -7.079632e-03 4.039095e-03 3.412621e-03 2.874954e-02
## 1990 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 1991 1.528061e-04 -1.320924e-02 -7.219711e-02 9.518527e-02 1.604164e-02
## 1992 -9.458997e-03 -1.994562e-03 1.530311e-02 -1.698042e-02 -4.366560e-04
## 1993 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 1994 2.698891e-03 -5.462731e-03 -1.857610e-02 -2.160040e-02 -3.633829e-02
## 1995 -1.831154e-02 1.009657e-02 -2.350766e-03 6.135421e-03 6.150450e-03
## 1996 5.807608e-04 1.218645e-02 -9.292849e-03 4.738768e-04 -1.443055e-02
## 1997 -2.528615e-02 -1.865877e-02 4.353349e-02 -2.187814e-02 -2.079752e-02
## 1998 -4.902776e-03 7.959138e-03 -3.356308e-02 -1.248066e-02 1.811547e-02
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## 2000 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2001 1.052635e-02 -2.027868e-03 -3.373768e-03 -3.433484e-03 -1.666706e-02
## 2002 -9.458997e-03 -1.994562e-03 1.530311e-02 -1.698042e-02 -4.366560e-04
## 2003 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2004 -2.216970e-02 -3.126870e-02 3.741056e-02 -2.415479e-02 -1.688938e-02
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## 2007 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 2008 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
## 2009 -7.912943e-03 -7.434701e-03 1.830000e-02 -8.551030e-03 -8.453845e-04
## 2010 -1.069565e-03 2.304072e-02 -6.930146e-03 6.392151e-03 -2.854996e-02
## 2011 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2012 -3.600525e-04 2.023280e-02 -3.063008e-02 -2.005910e-02 -1.289672e-02
## 2013 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
## 2014 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 2015 -8.544778e-03 1.082247e-02 2.540631e-02 -1.740511e-02 3.612032e-02
## 2016 3.659375e-02 -1.638766e-02 -2.705679e-02 1.262150e-02 -9.008431e-03
## 2017 -2.852298e-03 -1.096251e-02 8.471067e-04 -6.272188e-03 1.565498e-02
## 2018 -2.523239e-03 -3.809966e-03 8.655626e-04 -5.311008e-03 8.939613e-03
## 2019 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2020 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2021 -5.743172e-03 2.035867e-02 -2.404856e-03 1.034750e-02 -2.147714e-02
## 2022 8.611637e-03 1.814546e-03 -3.685994e-03 -9.308154e-03 3.149321e-02
## 2023 5.058181e-03 1.629855e-02 -6.112247e-03 -2.536675e-02 2.033575e-02
## 2024 3.574432e-02 -6.401259e-02 2.035192e-02 1.293665e-02 1.840667e-02
## 2025 -2.354363e-02 -1.573675e-02 4.343262e-02 -3.147764e-02 -4.393085e-02
## 2026 1.707678e-02 -5.337334e-02 1.672757e-02 2.227902e-02 6.733667e-03
## 2027 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2028 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 2029 -6.640896e-03 -2.124306e-02 4.125841e-02 3.305303e-02 2.797746e-02
## 2030 5.474601e-03 -1.156790e-04 -2.392749e-02 -2.074905e-02 -6.176334e-03
## 2031 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2032 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
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## 2034 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2035 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2036 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 2037 -8.195677e-03 1.284284e-02 8.626681e-03 1.847113e-02 1.873022e-02
## 2038 -4.815943e-03 -8.163720e-04 1.489843e-03 -2.903133e-03 4.959050e-03
## 2039 -8.152536e-03 5.934002e-02 6.368073e-04 3.027008e-02 2.323156e-02
## 2040 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2041 -1.969852e-03 -1.290423e-03 1.268980e-02 7.712960e-03 1.046303e-02

```

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## 2043 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2044 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2045 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2046 -7.472026e-03 6.831332e-03 1.020613e-02 -3.471730e-02 1.718946e-02
## 2047 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2048 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 2049 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 2051 -1.969852e-03 -1.290423e-03 1.268980e-02 7.712960e-03 1.046303e-02
## 2052 1.902338e-02 -1.079187e-02 8.510112e-03 2.755243e-02 1.829538e-02
## 2053 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2054 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2055 2.396971e-02 -1.606812e-03 1.051018e-02 2.931313e-02 1.388091e-02
## 2056 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2057 -1.068976e-02 1.120873e-02 2.160028e-02 3.116223e-02 9.919026e-03
## 2058 -1.694309e-03 -1.209313e-02 1.725328e-02 1.223830e-02 -3.418705e-03
## 2059 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2060 -2.695704e-03 2.451232e-02 -3.554215e-03 1.068037e-02 -1.114253e-02
## 2061 -1.698959e-02 -1.189839e-02 6.934306e-03 -1.002847e-03 2.594812e-02
## 2062 3.240052e-02 1.009533e-02 -2.146701e-03 4.622854e-03 3.355400e-03
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## 2064 9.277761e-03 6.071582e-03 -1.088791e-02 -1.142908e-03 -7.908554e-03
## 2065 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 2066 -4.815943e-03 -8.163720e-04 1.489843e-03 -2.903133e-03 4.959050e-03
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## 2069 -1.342001e-02 3.428684e-02 1.340378e-02 -1.546050e-02 4.086180e-02
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## 2073 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
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## 2079 5.067126e-03 -4.209105e-03 -2.086778e-02 -2.741985e-02 1.026145e-02
## 2080 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
## 2081 -2.081736e-03 -1.527237e-03 7.740283e-03 4.729287e-03 -3.614663e-04
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## 2087 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
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## 2089 6.659823e-03 -1.585331e-02 -1.920956e-02 1.128997e-03 -4.161862e-02
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## 2093 -1.749772e-03 2.241266e-03 1.116856e-02 -1.709230e-02 5.133541e-03
## 2094 -5.839718e-03 1.687522e-02 3.175338e-03 -1.947281e-03 -1.126078e-02
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## 2098 4.775410e-03 -8.836923e-04 -1.498533e-02 -3.377531e-02 -5.511776e-03
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## 2102 -1.124691e-04 1.174649e-02 -1.991810e-02 -3.919023e-02 1.651143e-02
## 2103 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
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## 2105 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 2106 6.795006e-03 -8.581203e-03 -1.423775e-02 3.128148e-04 -3.098677e-02
## 2107 -8.396236e-02 3.275404e-02 6.008823e-03 1.496213e-02 -2.809791e-02
## 2108 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
## 2109 3.726371e-03 8.187518e-03 -1.257582e-02 -1.314362e-02 -2.732588e-02
## 2110 -1.124691e-04 1.174649e-02 -1.991810e-02 -3.919023e-02 1.651143e-02
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## 2112 -3.437134e-04 -2.762016e-03 9.313873e-03 3.424744e-03 -6.944404e-03
## 2113 -4.815943e-03 -8.163720e-04 1.489843e-03 -2.903133e-03 4.959050e-03
## 2114 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 2118 -5.802281e-02 3.243765e-02 3.829202e-03 3.656230e-02 -2.468002e-02
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## 2120 -5.450077e-03 -4.531335e-03 2.664050e-03 -1.996115e-02 -8.718500e-03
## 2121 -5.430784e-03 -8.551225e-03 6.631636e-04 -8.755949e-04 1.134210e-02
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## 2124 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
## 2125 3.252277e-03 -2.943187e-03 -6.751862e-03 -8.576431e-03 -3.481487e-02
## 2126 2.520553e-02 -4.654163e-03 -2.004462e-02 -2.266395e-02 -2.420246e-03
## 2127 9.028057e-03 -1.459968e-02 -2.150123e-02 -4.690454e-03 4.981122e-03
## 2128 -1.694309e-03 -1.209313e-02 1.725328e-02 1.223830e-02 -3.418705e-03
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## 2131 2.938054e-02 -3.053901e-03 -1.967147e-02 -1.531467e-03 3.108677e-02
## 2132 9.380298e-03 -8.147243e-03 -1.235984e-02 -9.324774e-03 -3.807878e-02
## 2133 1.713236e-03 -2.500324e-02 4.795582e-03 2.194373e-02 -1.022245e-02
## 2134 1.256771e-02 -1.030799e-02 3.272895e-02 -2.400498e-03 -2.992504e-02
## 2135 -2.635122e-03 -4.046781e-03 -4.083959e-03 -8.294680e-03 -1.884884e-03
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## 2146 3.994374e-03 -2.179674e-04 -5.667609e-03 -1.010767e-02 2.919230e-02
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## 2164 9.028057e-03 -1.459968e-02 -2.150123e-02 -4.690454e-03 4.981122e-03
## 2165 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 2166 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 2168 8.274131e-03 1.048909e-02 -6.419189e-03 -1.022731e-02 3.389840e-03
## 2169 -2.601127e-02 -4.425997e-02 -2.911894e-02 8.113814e-02 -3.004005e-02
## 2170 -7.056922e-03 -7.079632e-03 4.039095e-03 3.412621e-03 2.874954e-02
## 2171 -2.054357e-02 -3.274029e-02 3.403463e-02 -2.844301e-02 -3.429681e-02
## 2172 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2187 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2188 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
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## 2194 -3.374938e-03 2.161229e-02 -4.696534e-03 4.528050e-03 2.512260e-02
## 2195 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2196 1.147032e-02 -1.585721e-02 -1.056937e-02 9.971835e-04 -2.235674e-02
## 2197 5.342295e-03 -1.065316e-02 -4.961388e-03 1.745527e-03 -1.909283e-02
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## 2202 2.715987e-03 3.854561e-02 -3.463999e-02 -3.793069e-02 7.023008e-03
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## 2205 -8.022949e-03 -1.551457e-02 -1.295875e-02 -2.009567e-02 1.183066e-02
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## 2207 -9.630258e-03 1.068397e-02 -2.096006e-03 3.505499e-03 -8.813222e-03
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## 2209 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2210 4.000558e-02 -6.143740e-02 2.105995e-02 1.694312e-02 2.884118e-03
## 2211 -1.137685e-02 2.802443e-03 2.456149e-02 -1.904766e-02 1.197550e-03
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## 2213 4.613360e-02 -6.664146e-02 1.545197e-02 1.619477e-02 -3.797919e-04
## 2214 6.465002e-03 5.297885e-04 -3.554062e-03 1.061017e-02 2.596400e-03
## 2215 -2.752047e-03 2.386278e-02 2.952690e-03 1.543523e-02 -1.768802e-03
## 2216 5.571875e-03 1.540026e-02 -8.529548e-03 1.401461e-02 -3.037363e-02
## 2217 6.482261e-03 1.601746e-02 -3.413098e-02 -1.473590e-02 5.798191e-03
## 2218 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
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## 2220 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2221 -2.249157e-03 2.013779e-02 -3.093873e-02 -8.312096e-03 9.720438e-03
## 2222 -1.517464e-02 1.388410e-03 -1.331629e-02 2.993499e-04 -1.682180e-02
## 2223 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2224 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2225 -1.716124e-02 -1.832239e-03 3.208694e-02 2.144749e-03 -1.258299e-02
## 2226 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
## 2227 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2228 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
## 2229 1.090390e-02 4.599989e-03 -1.426384e-02 -5.431124e-03 -2.531599e-02
## 2230 -1.969852e-03 -1.290423e-03 1.268980e-02 7.712960e-03 1.046303e-02
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## 2232 -2.822524e-03 6.232403e-03 2.636873e-02 2.198841e-04 2.406439e-02
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## 2237 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2238 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 2240 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2241 3.315796e-02 -5.376312e-03 4.374067e-03 1.999364e-03 -1.610485e-02
## 2242 1.691472e-02 2.052609e-02 1.410220e-02 9.253507e-04 -3.146080e-02
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## 2245 -1.345337e-02 -1.776595e-03 2.097072e-02 -6.872753e-03 -2.962896e-02
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## 2254 -2.635122e-03 -4.046781e-03 -4.083959e-03 -8.294680e-03 -1.884884e-03
## 2255 4.152871e-02 -5.937791e-02 1.282648e-02 -8.255762e-03 3.218721e-02
## 2256 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2273 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2274 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2278 2.923291e-02 -1.234769e-02 2.042135e-02 1.303936e-02 1.848099e-02
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## 2288 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
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## 2309 -2.579653e-04 2.549688e-02 -1.002091e-02 2.744128e-03 7.042388e-03
## 2310 -5.743172e-03 2.035867e-02 -2.404856e-03 1.034750e-02 -2.147714e-02
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## 2318 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2339 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2349 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
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## 2353 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 2359 -2.298911e-03 -8.442970e-03 1.267135e-02 6.751779e-03 1.717840e-02
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## 2375 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
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## 2382 1.888592e-02 -2.997403e-02 2.891869e-02 2.012495e-02 -4.872564e-02
## 2383 3.945219e-02 -6.395695e-02 9.235709e-03 3.919149e-03 1.360700e-03
## 2384 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2415 -2.684737e-02 4.113909e-04 8.300007e-03 -1.332279e-02 3.219647e-02
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## 2567 8.779318e-04 1.239196e-02 4.553214e-04 -7.831007e-03 2.528416e-02
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## 2570 1.661929e-02 -7.490335e-03 1.229887e-02 -1.484274e-02 -4.002660e-02
## 2571 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 2572 -3.375911e-03 3.712860e-03 1.454449e-02 -1.280408e-02 2.254098e-02
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## 2576 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 2577 -5.743172e-03 2.035867e-02 -2.404856e-03 1.034750e-02 -2.147714e-02
## 2578 2.951948e-03 -1.590895e-02 -8.093342e-03 1.014650e-02 -2.457265e-02
## 2579 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2580 9.277761e-03 6.071582e-03 -1.088791e-02 -1.142908e-03 -7.908554e-03
## 2581 -2.453161e-02 -1.393492e-02 -4.743129e-02 6.926714e-02 -1.457775e-02

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## 2585 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2586 -4.051588e-03 -2.817660e-03 2.043009e-02 1.244225e-02 1.010156e-02
## 2587 -5.430784e-03 -8.551225e-03 6.631636e-04 -8.755949e-04 1.134210e-02
## 2588 -1.163724e-04 -4.393620e-03 -3.275058e-03 5.311292e-03 5.725898e-03
## 2589 1.256771e-02 -1.030799e-02 3.272895e-02 -2.400498e-03 -2.992504e-02
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## 2597 5.067126e-03 -4.209105e-03 -2.086778e-02 -2.741985e-02 1.026145e-02
## 2598 -2.117540e-02 -1.448312e-02 4.114094e-02 -3.729709e-02 2.668888e-03
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## 2603 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
## 2604 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2605 -4.051588e-03 -2.817660e-03 2.043009e-02 1.244225e-02 1.010156e-02
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## 2607 -3.320448e-03 -1.062153e-02 2.062921e-02 1.652651e-02 1.398873e-02
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## 2612 -7.469562e-03 -1.299503e-02 -1.134508e-03 -7.071701e-03 1.335408e-02
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## 2617 7.270883e-03 1.421117e-02 4.605967e-03 4.968080e-03 -6.094129e-03
## 2618 4.063877e-03 -4.870306e-04 -9.842627e-03 -1.222445e-02 7.774832e-04
## 2619 8.508291e-04 2.832668e-03 7.391417e-03 6.357214e-03 1.253376e-02
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## 2657 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
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## 2662 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2663 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
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## 2682 -3.799704e-02 -3.069999e-02 1.377922e-02 8.686466e-02 -2.158862e-02
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## 2697 4.617264e-03 2.032513e-03 1.981615e-03 7.995126e-04 2.300901e-03
## 2698 2.637657e-02 -2.190466e-03 6.369563e-03 3.993543e-02 1.066720e-02
## 2699 -1.155880e-02 -3.347169e-03 6.271143e-03 -1.272519e-04 1.460601e-02
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## 2711 7.754159e-03 -6.675649e-03 -8.983910e-03 -5.036559e-03 -2.067134e-02
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## 2715 1.324436e-02 1.412196e-02 7.602333e-03 -1.031469e-02 -1.490400e-02
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## 2731 5.033684e-03 -1.438171e-02 -1.583363e-02 5.417213e-03 -2.421118e-02
## 2732 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2733 -8.270090e-02 2.896858e-02 -1.993134e-02 -1.690526e-02 1.545500e-02
## 2734 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2735 -3.188509e-03 -6.566325e-03 -1.590820e-02 -2.131865e-02 -3.408302e-03
## 2736 -3.663898e-03 -1.341867e-02 3.937871e-03 -2.624164e-03 -1.993737e-02
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## 2740 -7.275855e-03 -5.935957e-03 4.291691e-03 -7.203277e-05 1.304549e-02
## 2741 8.611637e-03 1.814546e-03 -3.685994e-03 -9.308154e-03 3.149321e-02
## 2742 -1.331569e-03 -2.511292e-03 1.802099e-02 -3.252149e-03 -3.974883e-03
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## 2744 6.128020e-03 -5.204056e-03 -5.607979e-03 -7.483430e-04 -3.263910e-03
## 2745 4.409176e-04 1.426603e-02 -8.093862e-03 -2.616627e-02 1.803485e-02
## 2746 4.370143e-04 -1.874076e-03 8.549184e-03 1.833526e-02 7.249316e-03
## 2747 -3.365183e-03 -5.133124e-03 2.445663e-02 -5.634729e-03 2.987034e-02
## 2748 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2749 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2750 -4.262556e-03 1.703172e-03 1.331408e-02 1.012083e-02 6.482468e-03
## 2751 9.703119e-03 -1.796582e-02 2.298860e-02 -8.890478e-03 -2.514910e-02
## 2752 -4.604974e-03 -5.337203e-03 8.605845e-03 -5.817208e-04 8.578146e-03
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## 2757 1.626139e-03 -1.471593e-03 -3.375931e-03 -4.288216e-03 -1.740743e-02
## 2758 1.072752e-03 -3.991137e-03 -1.520017e-02 -1.731218e-02 -1.893085e-02
## 2759 3.440987e-03 -2.737511e-03 -1.749185e-02 -2.313163e-02 2.766889e-02
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## 2792 7.157144e-03 -1.191908e-02 -1.907731e-02 -1.709789e-02 2.598349e-02
## 2793 2.013399e-03 1.843462e-02 -4.425281e-02 -1.843293e-02 3.237970e-03
## 2794 -4.902776e-03 7.959138e-03 -3.356308e-02 -1.248066e-02 1.811547e-02
## 2795 2.722157e-04 8.515870e-03 1.245972e-03 -3.151739e-03 -5.002303e-03
## 2796 -6.916175e-03 -1.047548e-02 1.068973e-02 5.952267e-03 1.487750e-02
## 2797 -7.056922e-03 -7.079632e-03 4.039095e-03 3.412621e-03 2.874954e-02

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## 2799	3.634125e-02	-4.434885e-02	6.131553e-04	1.524065e-02	3.363109e-02
## 2800	-2.473276e-02	-1.613923e-02	5.535773e-02	-8.854168e-03	-1.927410e-02
##	X30	X31	X32		
## 1	1.099360e-02	-8.542018e-03	-1.320378e-02		
## 2	3.647375e-02	1.192082e-02	1.884747e-02		
## 3	4.423949e-03	4.852904e-05	-5.510932e-03		
## 4	-1.243384e-02	-6.100376e-02	2.486732e-02		
## 5	3.414264e-02	-5.301262e-03	3.599192e-02		
## 6	-1.010963e-01	2.979707e-02	2.671090e-02		
## 7	3.904989e-04	-1.689204e-03	-3.754528e-02		
## 8	4.492052e-03	1.376104e-02	2.051043e-02		
## 9	-3.273455e-03	8.542271e-03	-2.253214e-03		
## 10	-7.080039e-03	2.705634e-02	2.113583e-02		
## 11	-2.341232e-02	1.787922e-02	1.031753e-02		
## 12	1.284882e-02	-9.822931e-03	-1.298204e-02		
## 13	5.876287e-02	1.239501e-02	1.881167e-02		
## 14	6.997366e-04	1.964610e-02	1.412813e-02		
## 15	-9.929092e-04	1.136306e-02	-2.069886e-02		
## 16	5.676759e-03	8.024680e-03	1.922142e-02		
## 17	-2.645380e-02	1.123679e-02	-6.580704e-03		
## 18	-2.341232e-02	1.787922e-02	1.031753e-02		
## 19	4.658406e-02	-2.075310e-02	2.507297e-02		
## 20	1.439427e-03	-3.467431e-02	4.223889e-03		
## 21	-1.302528e-02	-3.847890e-03	-8.940494e-03		
## 22	1.240682e-02	-1.540753e-02	-1.212749e-02		
## 23	-3.286129e-03	7.146075e-04	-4.333857e-03		
## 24	-1.333302e-02	-2.165542e-02	1.261385e-03		
## 25	1.403475e-02	5.043302e-02	-4.932746e-02		
## 26	6.433850e-03	3.702667e-02	-3.139943e-02		
## 27	-1.926943e-03	-8.496868e-03	1.029102e-02		
## 28	1.971028e-02	-7.534612e-03	4.950374e-03		
## 29	7.358541e-03	-6.621640e-03	2.758642e-03		
## 30	-1.799310e-02	-1.412540e-02	-9.975905e-03		
## 31	5.676759e-03	8.024680e-03	1.922142e-02		
## 32	1.303530e-02	1.403040e-03	2.198007e-02		
## 33	5.676759e-03	8.024680e-03	1.922142e-02		
## 34	5.676759e-03	8.024680e-03	1.922142e-02		
## 35	-7.803366e-03	8.794414e-03	-2.542273e-03		
## 36	-1.869987e-03	1.537681e-02	3.633652e-02		
## 37	-2.423554e-04	-2.002799e-02	2.068667e-02		
## 38	-3.663432e-02	-1.058851e-02	1.346626e-03		
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## 40	-4.955237e-03	2.318859e-02	1.420957e-02		
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## 44	2.742167e-03	1.469485e-02	1.095185e-02		
## 45	1.135352e-02	1.604936e-02	3.844285e-02		
## 46	3.882329e-02	-1.309085e-02	1.295460e-02		
## 47	-1.002740e-02	1.658216e-02	1.677581e-02		
## 48	5.632966e-03	-3.138434e-03	-1.917352e-02		
## 49	5.676759e-03	8.024680e-03	1.922142e-02		
## 50	6.433850e-03	3.702667e-02	-3.139943e-02		

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## 54    2.848273e-03  2.018508e-02  2.079622e-02
## 55    5.577707e-02 -7.454204e-03  3.792845e-03
## 56    6.433850e-03  3.702667e-02 -3.139943e-02
## 57   -3.374428e-03  6.363277e-03 -1.836422e-02
## 58    8.058277e-03  1.302446e-02  1.688678e-02
## 59   -3.086421e-02  1.096852e-02  1.406347e-02
## 60    5.676759e-03  8.024680e-03  1.922142e-02
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## 62   -8.087476e-05  4.075580e-03 -7.997357e-03
## 63   -1.147295e-02 -1.754838e-02  1.351438e-02
## 64    6.997366e-04  1.964610e-02  1.412813e-02
## 65    5.676759e-03  8.024680e-03  1.922142e-02
## 66    6.997366e-04  1.964610e-02  1.412813e-02
## 67    1.439427e-03 -3.467431e-02  4.223889e-03
## 68    1.959242e-04  1.399717e-02 -1.182717e-02
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## 71    5.676759e-03  8.024680e-03  1.922142e-02
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## 73   -2.704505e-03  2.557803e-02  4.320623e-03
## 74   -4.955237e-03  2.318859e-02  1.420957e-02
## 75   -3.273455e-03  8.542271e-03 -2.253214e-03
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## 82    1.622081e-02  2.513788e-02 -4.326206e-02
## 83   -5.197592e-03  3.160601e-03  3.489624e-02
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## 85   -1.271821e-02 -6.608698e-02  5.983119e-02
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## 89    5.676759e-03  8.024680e-03  1.922142e-02
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## 92   -3.616783e-03 -1.366471e-02  2.322452e-03
## 93    7.358541e-03 -6.621640e-03  2.758642e-03
## 94   -2.341232e-02  1.787922e-02  1.031753e-02
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## 97    6.433850e-03  3.702667e-02 -3.139943e-02
## 98    2.719773e-02  1.760049e-02  1.589135e-02
## 99   -4.955237e-03  2.318859e-02  1.420957e-02
## 100   7.358541e-03 -6.621640e-03  2.758642e-03
## 101   6.376495e-03  2.767078e-02  3.334956e-02
## 102  -1.203000e-02 -1.687220e-02 -2.450338e-02
## 103  -3.255686e-02  2.685472e-03 -2.076353e-02
## 104   2.369082e-02  2.555483e-03  1.357694e-02

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## 108 -1.663524e-02 -7.629314e-02 5.285115e-02
## 109 5.595884e-03 1.210026e-02 1.122407e-02
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## 155 4.559175e-03 2.186423e-02 2.278722e-02
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## 176 -1.184706e-03 5.736361e-03 1.289007e-03
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## 204 -1.223528e-02 -5.213888e-02 -3.421429e-02
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## 445 -3.273455e-03 8.542271e-03 -2.253214e-03
## 446 6.043554e-02 -5.990820e-03 -1.487332e-02
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## 487 5.567252e-02 7.152603e-04 1.191398e-02
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## 533 5.484334e-03 2.938970e-02 2.190370e-02
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## 696 5.676759e-03 8.024680e-03 1.922142e-02
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## 705 7.042695e-03 -1.952282e-02 -8.016094e-03
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## 735 8.058277e-03 1.302446e-02 1.688678e-02
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## 745 1.415004e-02 1.612859e-02 3.107120e-02
## 746 -4.805804e-03 -5.000289e-03 -5.300293e-03
## 747 -1.140914e-03 1.689948e-02 3.968395e-02
## 748 -2.106190e-02 -2.896927e-02 3.363333e-03
## 749 -4.769272e-04 8.621500e-03 -9.624860e-03
## 750 1.633228e-02 9.177123e-03 1.081829e-02
## 751 -2.704505e-03 2.557803e-02 4.320623e-03
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## 1003 5.676759e-03 8.024680e-03 1.922142e-02
## 1004 6.433850e-03 3.702667e-02 -3.139943e-02
## 1005 -8.087476e-05 4.075580e-03 -7.997357e-03
## 1006 5.676759e-03 8.024680e-03 1.922142e-02
## 1007 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1008 6.373078e-02 -2.965923e-03 6.682749e-03
## 1009 6.433850e-03 3.702667e-02 -3.139943e-02
## 1010 -4.228221e-03 -3.895949e-02 2.224679e-03
## 1011 -1.794912e-02 -4.492487e-02 -2.303813e-02
## 1012 -9.109997e-03 1.022213e-02 -1.176839e-02
## 1013 5.676759e-03 8.024680e-03 1.922142e-02
## 1014 -7.080039e-03 2.705634e-02 2.113583e-02
## 1015 -7.136907e-03 -2.222237e-02 1.184416e-02
## 1016 -7.821725e-03 4.357127e-02 3.196136e-02
## 1017 5.676759e-03 8.024680e-03 1.922142e-02
## 1018 3.369962e-02 -1.607983e-02 2.645540e-02
## 1019 6.433850e-03 3.702667e-02 -3.139943e-02
## 1020 5.676759e-03 8.024680e-03 1.922142e-02
## 1021 7.358541e-03 -6.621640e-03 2.758642e-03
## 1022 -4.769272e-04 8.621500e-03 -9.624860e-03

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## 1025  5.676759e-03  8.024680e-03  1.922142e-02
## 1026  2.381519e-03  4.999783e-03 -2.334646e-03
## 1027 -9.284431e-03 -1.794989e-02  3.232419e-04
## 1028  4.544597e-02 -2.305965e-02 -2.087803e-02
## 1029 -9.640225e-03 -2.426166e-02 -1.734197e-02
## 1030 -8.870419e-03  1.200649e-02 -8.173178e-04
## 1031 -2.768042e-03  1.247704e-02  2.268496e-03
## 1032 -2.866489e-03  2.038268e-02  1.775179e-02
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## 1038  4.831721e-03  1.129981e-02  2.346940e-03
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## 1044 -4.769272e-04  8.621500e-03 -9.624860e-03
## 1045 -2.423554e-04 -2.002799e-02  2.068667e-02
## 1046 -6.514725e-03 -3.295109e-02  2.340207e-02
## 1047 -8.087476e-05  4.075580e-03 -7.997357e-03
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## 1051 -8.237185e-03 -4.166548e-02 -2.868219e-03
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## 1057 -3.963466e-03 -1.623698e-02  1.879453e-03
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## 1062  5.434403e-03 -1.200331e-02  3.990809e-02
## 1063 -2.173054e-02  3.232896e-03 -6.145248e-03
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## 1068  9.040323e-03 -2.126796e-02 -1.370414e-02
## 1069 -4.897719e-03 -2.685946e-02  1.706096e-02
## 1070 -8.849074e-03  7.479391e-03 -9.506934e-03
## 1071  2.995189e-02 -1.567786e-02 -1.085008e-02
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## 1073  1.008968e-02 -4.321955e-03 -1.509780e-02
## 1074 -2.341232e-02  1.787922e-02  1.031753e-02
## 1075 -1.333240e-02 -2.407629e-02  4.386460e-02
## 1076 -2.173054e-02  3.232896e-03 -6.145248e-03

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## 1083  2.302331e-03  1.438796e-02  8.572054e-04
## 1084 -1.725574e-03  3.483207e-03 -2.193216e-02
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## 1095 -4.379221e-05 -1.116311e-02 -3.839494e-02
## 1096 -2.866489e-03  2.038268e-02  1.775179e-02
## 1097  2.161642e-02  3.040723e-03 -1.116164e-02
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## 1102 -2.917047e-03  5.981390e-03  1.645059e-02
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## 1120  3.373495e-02 -1.327850e-02 -2.505281e-02
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## 1124  4.089770e-02  1.196935e-02  1.333654e-02
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## 1127  2.560370e-03  2.045361e-02 -4.300408e-03
## 1128 -8.275434e-02  1.000694e-02  1.780466e-02
## 1129 -4.955237e-03  2.318859e-02  1.420957e-02
## 1130  6.433850e-03  3.702667e-02 -3.139943e-02

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## 1132 2.381519e-03 4.999783e-03 -2.334646e-03
## 1133 -1.474640e-02 -9.006113e-03 1.126117e-02
## 1134 -8.087476e-05 4.075580e-03 -7.997357e-03
## 1135 -3.273455e-03 8.542271e-03 -2.253214e-03
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## 1145 1.211061e-02 4.505135e-02 -1.217801e-02
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## 1163 6.997366e-04 1.964610e-02 1.412813e-02
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## 1176 2.554172e-03 -1.994876e-02 1.331502e-02
## 1177 -9.788180e-03 -2.440882e-02 2.114886e-02
## 1178 -1.020139e-02 -3.926647e-02 2.145171e-02
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## 1182 -5.197592e-03 3.160601e-03 3.489624e-02
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## 1184 5.434403e-03 -1.200331e-02 3.990809e-02

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## 1185 1.135352e-02 1.604936e-02 3.844285e-02
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## 1188 7.358541e-03 -6.621640e-03 2.758642e-03
## 1189 4.102202e-02 -2.310818e-02 -1.536710e-02
## 1190 8.228018e-03 2.473879e-02 -2.301198e-03
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## 1196 2.985125e-04 -1.777484e-02 4.390784e-02
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## 1237 -6.920052e-03 -5.553791e-03 8.625945e-03
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## 1277  7.358541e-03 -6.621640e-03  2.758642e-03
## 1278  1.748512e-03 -2.949052e-03 -4.282095e-03
## 1279  7.358541e-03 -6.621640e-03  2.758642e-03
## 1280 -4.660305e-02 -1.463895e-02  1.203169e-02
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## 1282 -5.197592e-03  3.160601e-03  3.489624e-02
## 1283  1.439427e-03 -3.467431e-02  4.223889e-03
## 1284 -8.087476e-05  4.075580e-03 -7.997357e-03
## 1285  2.114047e-02  4.160578e-03  2.658022e-02
## 1286  1.690893e-03 -1.090682e-02  7.594322e-04
## 1287 -4.966100e-03  2.592275e-04 -3.708021e-02
## 1288  1.633228e-02  9.177123e-03  1.081829e-02
## 1289  5.676759e-03  8.024680e-03  1.922142e-02
## 1290 -3.733376e-03 -1.075849e-02 -1.202720e-02
## 1291 -1.331332e-03 -3.598452e-03 -1.164581e-02
## 1292  7.358541e-03 -6.621640e-03  2.758642e-03

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## 1295 3.002067e-03 3.403406e-02 1.498534e-02
## 1296 5.676759e-03 8.024680e-03 1.922142e-02
## 1297 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1298 1.070953e-03 3.562436e-03 -2.930381e-02
## 1299 1.959242e-04 1.399717e-02 -1.182717e-02
## 1300 3.438500e-02 1.472673e-02 1.530525e-02
## 1301 -2.681656e-02 2.381115e-02 5.100213e-04
## 1302 -1.742662e-02 -1.569135e-04 -2.871591e-02
## 1303 -5.546515e-03 -9.483957e-03 -3.429637e-03
## 1304 4.871271e-02 -2.480850e-02 -2.336662e-02
## 1305 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1306 2.381519e-03 4.999783e-03 -2.334646e-03
## 1307 5.676759e-03 8.024680e-03 1.922142e-02
## 1308 1.546372e-02 -3.864102e-03 7.358797e-03
## 1309 1.211061e-02 4.505135e-02 -1.217801e-02
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## 1312 -4.121022e-02 2.383867e-02 3.524084e-02
## 1313 7.358541e-03 -6.621640e-03 2.758642e-03
## 1314 5.676759e-03 8.024680e-03 1.922142e-02
## 1315 2.752735e-03 -1.108388e-02 -4.576659e-02
## 1316 1.801406e-02 -5.469198e-03 -5.644487e-03
## 1317 1.297910e-02 -5.428660e-03 2.890193e-03
## 1318 -2.423554e-04 -2.002799e-02 2.068667e-02
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## 1331 4.422035e-04 -2.038319e-02 -2.538673e-02
## 1332 7.358541e-03 -6.621640e-03 2.758642e-03
## 1333 -2.704505e-03 2.557803e-02 4.320623e-03
## 1334 -6.514725e-03 -3.295109e-02 2.340207e-02
## 1335 5.242670e-03 -3.928789e-02 -6.206901e-03
## 1336 4.434707e-03 -7.794674e-04 -1.501636e-02
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## 1339 -3.963466e-03 -1.623698e-02 1.879453e-03
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## 1342 3.623139e-02 -8.107172e-03 3.953414e-02
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## 1369 3.337395e-03 2.332384e-03 1.584952e-02
## 1370 -5.910003e-03 -2.431317e-02 1.868746e-02
## 1371 2.381519e-03 4.999783e-03 -2.334646e-03
## 1372 -3.273455e-03 8.542271e-03 -2.253214e-03
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## 1382 5.676759e-03 8.024680e-03 1.922142e-02
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## 1396 1.904089e-03 -1.043321e-03 -1.165818e-02
## 1397 9.978400e-03 -1.014038e-02 2.493780e-03
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## 1399 1.289724e-02 8.152439e-03 6.338845e-03
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## 1405 1.116704e-02 4.823390e-03 3.480738e-03
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## 1424 1.296181e-02 8.529856e-03 -9.481341e-03
## 1425 -1.249085e-03 1.660268e-02 -1.295019e-02
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## 1451 -3.616783e-03 -1.366471e-02 2.322452e-03
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## 1453 5.676759e-03 8.024680e-03 1.922142e-02
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## 1462 4.573812e-04 -3.818868e-04 3.481481e-02
## 1463 9.040323e-03 -2.126796e-02 -1.370414e-02
## 1464 6.541256e-02 -1.761224e-02 -9.780032e-03
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## 1506 -9.011288e-02 1.662858e-02 1.504601e-02
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## 1553  1.959242e-04  1.399717e-02 -1.182717e-02
## 1554  1.771892e-03 -3.539669e-02 -5.164156e-02
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## 1557  5.676759e-03  8.024680e-03  1.922142e-02
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## 1559  8.058277e-03  1.302446e-02  1.688678e-02
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## 1611 -2.341232e-02 1.787922e-02 1.031753e-02
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## 1829 5.676759e-03 8.024680e-03 1.922142e-02
## 1830 2.796527e-03 7.922916e-05 -7.371646e-03
## 1831 5.676759e-03 8.024680e-03 1.922142e-02
## 1832 1.801406e-02 -5.469198e-03 -5.644487e-03

```

```

## 1833 5.676759e-03 8.024680e-03 1.922142e-02
## 1834 1.639803e-03 -1.085484e-03 -1.036053e-02
## 1835 -7.188637e-03 -2.639828e-03 -1.728010e-02
## 1836 5.676759e-03 8.024680e-03 1.922142e-02
## 1837 5.676759e-03 8.024680e-03 1.922142e-02
## 1838 -1.799196e-02 -2.488218e-02 -5.100303e-02
## 1839 -5.651461e-20 -1.637839e-20 -3.144757e-20
## 1840 -6.595600e-03 -2.887551e-02 1.540472e-02
## 1841 -4.955237e-03 2.318859e-02 1.420957e-02
## 1842 5.676759e-03 8.024680e-03 1.922142e-02
## 1843 9.110970e-06 3.739504e-03 1.722221e-02
## 1844 1.998481e-04 -4.041118e-02 -4.700056e-03
## 1845 5.676759e-03 8.024680e-03 1.922142e-02
## 1846 7.358541e-03 -6.621640e-03 2.758642e-03
## 1847 -2.341232e-02 1.787922e-02 1.031753e-02
## 1848 5.676759e-03 8.024680e-03 1.922142e-02
## 1849 6.118962e-03 -1.235851e-02 -6.165303e-03
## 1850 5.676759e-03 8.024680e-03 1.922142e-02
## 1851 4.608795e-02 3.125253e-03 -8.986698e-03
## 1852 7.042695e-03 -1.952282e-02 -8.016094e-03
## 1853 5.676759e-03 8.024680e-03 1.922142e-02
## 1854 6.647294e-02 1.172893e-02 1.763460e-02
## 1855 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1856 6.433850e-03 3.702667e-02 -3.139943e-02
## 1857 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1858 -2.801188e-02 -1.160583e-02 -3.693412e-02
## 1859 6.997366e-04 1.964610e-02 1.412813e-02
## 1860 5.676759e-03 8.024680e-03 1.922142e-02
## 1861 -5.070372e-03 -1.910917e-03 1.411291e-03
## 1862 2.381519e-03 4.999783e-03 -2.334646e-03
## 1863 -1.724843e-02 5.927034e-03 1.520043e-03
## 1864 -4.955237e-03 2.318859e-02 1.420957e-02
## 1865 3.363564e-03 -2.929264e-02 -3.292556e-02
## 1866 7.358541e-03 -6.621640e-03 2.758642e-03
## 1867 7.358541e-03 -6.621640e-03 2.758642e-03
## 1868 -1.184706e-03 5.736361e-03 1.289007e-03
## 1869 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1870 6.997366e-04 1.964610e-02 1.412813e-02
## 1871 1.959242e-04 1.399717e-02 -1.182717e-02
## 1872 5.676759e-03 8.024680e-03 1.922142e-02
## 1873 -6.076446e-03 1.074077e-03 -9.111766e-03
## 1874 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1875 1.633228e-02 9.177123e-03 1.081829e-02
## 1876 6.376495e-03 2.767078e-02 3.334956e-02
## 1877 -3.893397e-03 3.850688e-04 4.275971e-03
## 1878 2.531641e-02 -1.892254e-02 -2.197572e-02
## 1879 6.373078e-02 -2.965923e-03 6.682749e-03
## 1880 -6.009268e-03 1.249909e-02 7.696794e-03
## 1881 1.616345e-02 1.578200e-02 2.148693e-02
## 1882 6.373078e-02 -2.965923e-03 6.682749e-03
## 1883 -5.197592e-03 3.160601e-03 3.489624e-02
## 1884 8.115633e-03 2.238035e-02 -4.786221e-02
## 1885 -1.199556e-02 -2.697859e-02 -7.646520e-03
## 1886 -7.870669e-02 2.284957e-02 4.251206e-03

```

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## 1887 7.042695e-03 -1.952282e-02 -8.016094e-03
## 1888 5.434403e-03 -1.200331e-02 3.990809e-02
## 1889 -1.750359e-02 1.071920e-02 1.489393e-02
## 1890 1.055907e-02 5.823839e-02 2.007656e-02
## 1891 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1892 -2.784543e-02 -1.252538e-02 -1.583780e-02
## 1893 2.346413e-02 6.110071e-02 2.626484e-02
## 1894 -4.688698e-02 1.581399e-02 1.601941e-02
## 1895 -2.341232e-02 1.787922e-02 1.031753e-02
## 1896 2.200904e-02 1.720180e-02 3.003972e-02
## 1897 -1.239579e-03 -5.736867e-03 -8.923946e-03
## 1898 2.381519e-03 4.999783e-03 -2.334646e-03
## 1899 7.358541e-03 -6.621640e-03 2.758642e-03
## 1900 -9.812511e-03 -2.766760e-02 5.741218e-03
## 1901 1.959242e-04 1.399717e-02 -1.182717e-02
## 1902 -3.515810e-03 -1.148572e-02 1.843346e-02
## 1903 9.310030e-03 -3.267282e-03 -2.148749e-02
## 1904 -1.039732e-02 -5.326365e-02 3.327888e-02
## 1905 -4.955237e-03 2.318859e-02 1.420957e-02
## 1906 -2.062618e-02 -1.725424e-02 8.987534e-03
## 1907 -1.107013e-02 7.430320e-03 4.517013e-03
## 1908 1.966649e-02 -1.869773e-02 -3.344457e-02
## 1909 5.676759e-03 8.024680e-03 1.922142e-02
## 1910 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1911 -9.511381e-03 -1.448722e-02 1.731905e-02
## 1912 1.024434e-02 -1.227067e-02 2.295218e-02
## 1913 1.633228e-02 9.177123e-03 1.081829e-02
## 1914 4.376419e-02 -8.413334e-03 -4.415248e-03
## 1915 -2.132090e-02 -1.478249e-02 -1.134880e-02
## 1916 -3.515810e-03 -1.148572e-02 1.843346e-02
## 1917 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1918 7.358541e-03 -6.621640e-03 2.758642e-03
## 1919 -1.142528e-02 -8.234276e-03 -2.921799e-02
## 1920 6.997366e-04 1.964610e-02 1.412813e-02
## 1921 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1922 5.676759e-03 8.024680e-03 1.922142e-02
## 1923 1.373620e-02 2.357333e-02 -4.773066e-02
## 1924 1.211061e-02 4.505135e-02 -1.217801e-02
## 1925 5.562873e-02 -1.044785e-02 -2.648096e-02
## 1926 -1.199556e-02 -2.697859e-02 -7.646520e-03
## 1927 -2.423554e-04 -2.002799e-02 2.068667e-02
## 1928 -1.787110e-02 5.451018e-03 2.513835e-03
## 1929 1.179180e-02 5.007452e-02 5.929007e-03
## 1930 7.358541e-03 -6.621640e-03 2.758642e-03
## 1931 7.358541e-03 -6.621640e-03 2.758642e-03
## 1932 1.133124e-02 -1.836441e-02 -3.491567e-02
## 1933 5.676759e-03 8.024680e-03 1.922142e-02
## 1934 5.360913e-03 -4.876495e-03 8.446687e-03
## 1935 -9.959037e-03 -1.923848e-02 7.650434e-04
## 1936 -6.514725e-03 -3.295109e-02 2.340207e-02
## 1937 -4.955237e-03 2.318859e-02 1.420957e-02
## 1938 1.681782e-03 -1.464632e-02 -1.646278e-02
## 1939 5.676759e-03 8.024680e-03 1.922142e-02
## 1940 -5.538190e-03 -3.383390e-03 3.370040e-02

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## 1941  5.676759e-03  8.024680e-03  1.922142e-02
## 1942  6.997366e-04  1.964610e-02  1.412813e-02
## 1943 -1.794912e-02 -4.492487e-02 -2.303813e-02
## 1944 -1.841923e-02 -1.602207e-04 -2.445239e-02
## 1945  5.676759e-03  8.024680e-03  1.922142e-02
## 1946  4.033237e-02 -2.134714e-02  2.866974e-02
## 1947  5.434403e-03 -1.200331e-02  3.990809e-02
## 1948  1.703202e-02  2.882323e-02  2.494643e-02
## 1949 -1.184706e-03  5.736361e-03  1.289007e-03
## 1950 -1.537660e-02 -3.411289e-02  9.077863e-03
## 1951 -8.087476e-05  4.075580e-03 -7.997357e-03
## 1952 -2.132090e-02 -1.478249e-02 -1.134880e-02
## 1953 -7.298258e-03  2.562427e-02  2.341329e-02
## 1954  1.439427e-03 -3.467431e-02  4.223889e-03
## 1955 -1.880666e-18 -5.564023e-19 -1.040576e-18
## 1956  2.888325e-19  8.618497e-20  1.612374e-19
## 1957  5.676759e-03  8.024680e-03  1.922142e-02
## 1958 -2.423554e-04 -2.002799e-02  2.068667e-02
## 1959  7.358541e-03 -6.621640e-03  2.758642e-03
## 1960 -1.165062e-02 -3.872261e-02  2.740182e-02
## 1961 -2.423554e-04 -2.002799e-02  2.068667e-02
## 1962  6.997366e-04  1.964610e-02  1.412813e-02
## 1963 -4.955237e-03  2.318859e-02  1.420957e-02
## 1964  5.838239e-03  3.212825e-02 -9.462604e-03
## 1965  5.676759e-03  8.024680e-03  1.922142e-02
## 1966  1.801406e-02 -5.469198e-03 -5.644487e-03
## 1967 -2.423554e-04 -2.002799e-02  2.068667e-02
## 1968  1.439427e-03 -3.467431e-02  4.223889e-03
## 1969  9.110970e-06  3.739504e-03  1.722221e-02
## 1970  1.015507e-02 -6.542411e-03 -4.613004e-03
## 1971  5.676759e-03  8.024680e-03  1.922142e-02
## 1972  1.614806e-04  2.410357e-02 -2.868403e-02
## 1973  7.358541e-03 -6.621640e-03  2.758642e-03
## 1974  5.676759e-03  8.024680e-03  1.922142e-02
## 1975  5.676759e-03  8.024680e-03  1.922142e-02
## 1976  2.551259e-03  1.671411e-02 -2.152262e-02
## 1977  6.115038e-03  4.204984e-02 -1.329242e-02
## 1978  3.072525e-02 -7.028725e-03 -1.415492e-03
## 1979 -2.292519e-02 -2.097646e-03 -1.770138e-02
## 1980 -1.026898e-02  4.168898e-03 -2.720673e-02
## 1981 -2.341232e-02  1.787922e-02  1.031753e-02
## 1982  5.676759e-03  8.024680e-03  1.922142e-02
## 1983  1.439427e-03 -3.467431e-02  4.223889e-03
## 1984  5.676759e-03  8.024680e-03  1.922142e-02
## 1985  2.551259e-03  1.671411e-02 -2.152262e-02
## 1986  5.676759e-03  8.024680e-03  1.922142e-02
## 1987 -3.515810e-03 -1.148572e-02  1.843346e-02
## 1988  7.358541e-03 -6.621640e-03  2.758642e-03
## 1989 -5.757633e-03 -3.949101e-03 -2.721878e-02
## 1990  7.358541e-03 -6.621640e-03  2.758642e-03
## 1991 -6.752154e-03  1.273540e-02  1.787407e-02
## 1992  1.616345e-02  1.578200e-02  2.148693e-02
## 1993  1.633228e-02  9.177123e-03  1.081829e-02
## 1994  1.303530e-02  1.403040e-03  2.198007e-02

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## 1997 2.309905e-03 3.088280e-03 -8.090103e-03
## 1998 3.606678e-02 8.040839e-05 -1.157529e-03
## 1999 2.497895e-03 -1.398880e-02 2.005245e-02
## 2000 5.676759e-03 8.024680e-03 1.922142e-02
## 2001 8.228018e-03 2.473879e-02 -2.301198e-03
## 2002 1.616345e-02 1.578200e-02 2.148693e-02
## 2003 5.676759e-03 8.024680e-03 1.922142e-02
## 2004 1.008968e-02 -4.321955e-03 -1.509780e-02
## 2005 1.135352e-02 1.604936e-02 3.844285e-02
## 2006 5.676759e-03 8.024680e-03 1.922142e-02
## 2007 -2.341232e-02 1.787922e-02 1.031753e-02
## 2008 6.997366e-04 1.964610e-02 1.412813e-02
## 2009 6.541256e-02 -1.761224e-02 -9.780032e-03
## 2010 1.695679e-02 3.120086e-02 2.620286e-02
## 2011 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2012 -4.406429e-02 -1.573180e-02 -4.012732e-02
## 2013 1.211061e-02 4.505135e-02 -1.217801e-02
## 2014 -3.515810e-03 -1.148572e-02 1.843346e-02
## 2015 3.464170e-02 6.888613e-03 -2.221142e-03
## 2016 9.245728e-03 -1.618715e-02 -9.137008e-03
## 2017 -3.515810e-03 -1.148572e-02 1.843346e-02
## 2018 5.408679e-04 2.253154e-03 2.322117e-02
## 2019 5.676759e-03 8.024680e-03 1.922142e-02
## 2020 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2021 2.272517e-03 1.395661e-02 9.413912e-03
## 2022 4.573812e-04 -3.818868e-04 3.481481e-02
## 2023 -2.365468e-02 -2.148775e-03 3.100420e-02
## 2024 -1.294885e-02 -1.402543e-02 -4.458322e-02
## 2025 -1.002740e-02 1.658216e-02 1.677581e-02
## 2026 -1.289594e-02 8.771878e-04 1.103393e-02
## 2027 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2028 1.633228e-02 9.177123e-03 1.081829e-02
## 2029 5.484334e-03 2.938970e-02 2.190370e-02
## 2030 -2.784543e-02 -1.252538e-02 -1.583780e-02
## 2031 5.676759e-03 8.024680e-03 1.922142e-02
## 2032 1.211061e-02 4.505135e-02 -1.217801e-02
## 2033 5.676759e-03 8.024680e-03 1.922142e-02
## 2034 7.358541e-03 -6.621640e-03 2.758642e-03
## 2035 5.676759e-03 8.024680e-03 1.922142e-02
## 2036 1.439427e-03 -3.467431e-02 4.223889e-03
## 2037 1.002722e-02 1.520002e-02 -1.775092e-02
## 2038 -4.769272e-04 8.621500e-03 -9.624860e-03
## 2039 1.005145e-03 -8.963482e-03 -3.028253e-03
## 2040 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2041 -1.140914e-03 1.689948e-02 3.968395e-02
## 2042 1.637990e-03 -2.580943e-02 -5.485772e-02
## 2043 7.358541e-03 -6.621640e-03 2.758642e-03
## 2044 5.676759e-03 8.024680e-03 1.922142e-02
## 2045 7.358541e-03 -6.621640e-03 2.758642e-03
## 2046 4.200024e-02 2.669729e-04 5.375010e-04
## 2047 7.358541e-03 -6.621640e-03 2.758642e-03
## 2048 1.439427e-03 -3.467431e-02 4.223889e-03

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## 2049 5.676759e-03 8.024680e-03 1.922142e-02
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## 2051 -1.140914e-03 1.689948e-02 3.968395e-02
## 2052 2.347109e-03 9.735252e-03 -2.121663e-03
## 2053 -4.955237e-03 2.318859e-02 1.420957e-02
## 2054 7.358541e-03 -6.621640e-03 2.758642e-03
## 2055 6.161431e-03 3.446135e-03 2.335272e-02
## 2056 5.676759e-03 8.024680e-03 1.922142e-02
## 2057 -6.620747e-04 2.062678e-02 1.144337e-03
## 2058 8.418925e-03 2.271953e-02 3.017327e-02
## 2059 5.676759e-03 8.024680e-03 1.922142e-02
## 2060 1.128003e-02 2.317618e-02 6.981440e-03
## 2061 -6.595600e-03 -2.887551e-02 1.540472e-02
## 2062 -1.437405e-02 -4.778997e-02 2.058482e-02
## 2063 5.676759e-03 8.024680e-03 1.922142e-02
## 2064 1.959242e-04 1.399717e-02 -1.182717e-02
## 2065 2.381519e-03 4.999783e-03 -2.334646e-03
## 2066 -4.769272e-04 8.621500e-03 -9.624860e-03
## 2067 5.676759e-03 8.024680e-03 1.922142e-02
## 2068 4.208240e-02 6.232987e-03 1.204753e-02
## 2069 4.192675e-02 7.393789e-03 -3.092391e-02
## 2070 -1.452539e-02 1.554898e-02 -7.358852e-04
## 2071 5.676759e-03 8.024680e-03 1.922142e-02
## 2072 -9.812511e-03 -2.766760e-02 5.741218e-03
## 2073 -2.341232e-02 1.787922e-02 1.031753e-02
## 2074 5.676759e-03 8.024680e-03 1.922142e-02
## 2075 1.801406e-02 -5.469198e-03 -5.644487e-03
## 2076 1.297910e-02 -5.428660e-03 2.890193e-03
## 2077 -5.788858e-02 2.497687e-02 -8.868871e-03
## 2078 5.676759e-03 8.024680e-03 1.922142e-02
## 2079 8.058277e-03 1.302446e-02 1.688678e-02
## 2080 1.211061e-02 4.505135e-02 -1.217801e-02
## 2081 -1.725574e-03 3.483207e-03 -2.193216e-02
## 2082 2.381519e-03 4.999783e-03 -2.334646e-03
## 2083 5.676759e-03 8.024680e-03 1.922142e-02
## 2084 -4.379221e-05 -1.116311e-02 -3.839494e-02
## 2085 1.614806e-04 2.410357e-02 -2.868403e-02
## 2086 7.358541e-03 -6.621640e-03 2.758642e-03
## 2087 -4.955237e-03 2.318859e-02 1.420957e-02
## 2088 -1.107013e-02 7.430320e-03 4.517013e-03
## 2089 1.243646e-03 -2.237991e-02 -6.933912e-03
## 2090 -1.359939e-03 -6.188445e-03 2.425246e-02
## 2091 5.838239e-03 3.212825e-02 -9.462604e-03
## 2092 1.439427e-03 -3.467431e-02 4.223889e-03
## 2093 1.881989e-02 2.961494e-03 -3.789989e-03
## 2094 -7.559651e-02 1.558363e-02 2.258684e-02
## 2095 -2.174140e-02 -1.969647e-02 -5.743503e-02
## 2096 7.358541e-03 -6.621640e-03 2.758642e-03
## 2097 -1.725574e-03 3.483207e-03 -2.193216e-02
## 2098 -7.530245e-02 1.691764e-02 1.405872e-02
## 2099 5.676759e-03 8.024680e-03 1.922142e-02
## 2100 5.676759e-03 8.024680e-03 1.922142e-02
## 2101 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2102 -2.173054e-02 3.232896e-03 -6.145248e-03

```

```

## 2103  5.676759e-03  8.024680e-03  1.922142e-02
## 2104  1.959242e-04  1.399717e-02 -1.182717e-02
## 2105  2.381519e-03  4.999783e-03 -2.334646e-03
## 2106 -1.582181e-02 -3.927119e-03 -1.568847e-03
## 2107 -5.553834e-03  1.050429e-02  1.204914e-02
## 2108 -1.184706e-03  5.736361e-03  1.289007e-03
## 2109  1.015507e-02 -6.542411e-03 -4.613004e-03
## 2110 -2.173054e-02  3.232896e-03 -6.145248e-03
## 2111  5.676759e-03  8.024680e-03  1.922142e-02
## 2112  4.535844e-03  2.492416e-02  5.890537e-02
## 2113 -4.769272e-04  8.621500e-03 -9.624860e-03
## 2114  7.358541e-03 -6.621640e-03  2.758642e-03
## 2115  8.058277e-03  1.302446e-02  1.688678e-02
## 2116  4.056766e-04  1.831210e-02  2.265625e-02
## 2117  5.676759e-03  8.024680e-03  1.922142e-02
## 2118  1.748512e-03 -2.949052e-03 -4.282095e-03
## 2119 -7.694246e-03 -2.693869e-02  2.443261e-02
## 2120 -8.286365e-02 -5.016786e-03 -1.800183e-02
## 2121 -8.087476e-05  4.075580e-03 -7.997357e-03
## 2122 -2.132090e-02 -1.478249e-02 -1.134880e-02
## 2123  1.681782e-03 -1.464632e-02 -1.646278e-02
## 2124  2.381519e-03  4.999783e-03 -2.334646e-03
## 2125  1.135352e-02  1.604936e-02  3.844285e-02
## 2126  1.349272e-03  5.877445e-03  1.045544e-02
## 2127 -3.733376e-03 -1.075849e-02 -1.202720e-02
## 2128  8.418925e-03  2.271953e-02  3.017327e-02
## 2129  7.215219e-04  3.121327e-02  3.343099e-02
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## 2131  9.683864e-03 -8.453557e-03 -1.866588e-02
## 2132  1.778737e-02  5.307603e-02  7.043417e-03
## 2133 -1.690946e-03 -1.570974e-02 -1.520349e-02
## 2134 -4.805804e-03 -5.000289e-03 -5.300293e-03
## 2135 -4.379221e-05 -1.116311e-02 -3.839494e-02
## 2136 -5.757633e-03 -3.949101e-03 -2.721878e-02
## 2137  1.748512e-03 -2.949052e-03 -4.282095e-03
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## 2139  5.676759e-03  8.024680e-03  1.922142e-02
## 2140 -4.955237e-03  2.318859e-02  1.420957e-02
## 2141 -2.423554e-04 -2.002799e-02  2.068667e-02
## 2142  5.676759e-03  8.024680e-03  1.922142e-02
## 2143  5.360913e-03 -4.876495e-03  8.446687e-03
## 2144 -2.423554e-04 -2.002799e-02  2.068667e-02
## 2145 -2.350567e-02  4.346875e-03  1.682211e-02
## 2146  6.997366e-04  1.964610e-02  1.412813e-02
## 2147 -6.647883e-03  1.490555e-02 -2.061743e-02
## 2148  7.358541e-03 -6.621640e-03  2.758642e-03
## 2149  4.492052e-03  1.376104e-02  2.051043e-02
## 2150 -2.211615e-03 -1.426125e-02 -1.218681e-02
## 2151  2.381519e-03  4.999783e-03 -2.334646e-03
## 2152 -6.076446e-03  1.074077e-03 -9.111766e-03
## 2153  5.676759e-03  8.024680e-03  1.922142e-02
## 2154 -2.158709e-03  2.326782e-02  6.837921e-03
## 2155  1.576644e-02  3.702725e-03  4.123628e-03
## 2156 -1.117584e-03  1.383955e-02  3.565794e-03

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## 2157 8.165543e-03 -9.703625e-03 2.205166e-02
## 2158 -1.184706e-03 5.736361e-03 1.289007e-03
## 2159 5.676759e-03 8.024680e-03 1.922142e-02
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## 2164 -3.733376e-03 -1.075849e-02 -1.202720e-02
## 2165 -2.341232e-02 1.787922e-02 1.031753e-02
## 2166 -3.273455e-03 8.542271e-03 -2.253214e-03
## 2167 6.433850e-03 3.702667e-02 -3.139943e-02
## 2168 9.173023e-03 2.775001e-02 2.597791e-02
## 2169 2.637789e-03 -1.123266e-02 -1.135186e-02
## 2170 -5.757633e-03 -3.949101e-03 -2.721878e-02
## 2171 1.576644e-02 3.702725e-03 4.123628e-03
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## 2174 6.373078e-02 -2.965923e-03 6.682749e-03
## 2175 -6.514725e-03 -3.295109e-02 2.340207e-02
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## 2177 -1.331332e-03 -3.598452e-03 -1.164581e-02
## 2178 8.165543e-03 -9.703625e-03 2.205166e-02
## 2179 1.015507e-02 -6.542411e-03 -4.613004e-03
## 2180 -5.197592e-03 3.160601e-03 3.489624e-02
## 2181 5.676759e-03 8.024680e-03 1.922142e-02
## 2182 6.997366e-04 1.964610e-02 1.412813e-02
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## 2185 -5.197592e-03 3.160601e-03 3.489624e-02
## 2186 2.381519e-03 4.999783e-03 -2.334646e-03
## 2187 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2188 -1.184706e-03 5.736361e-03 1.289007e-03
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## 2190 -2.173054e-02 3.232896e-03 -6.145248e-03
## 2191 6.025893e-03 -1.700674e-02 -3.672405e-03
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## 2197 -3.893397e-03 3.850688e-04 4.275971e-03
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## 2200 7.166116e-03 1.474338e-02 5.440917e-03
## 2201 -5.696744e-19 -1.702452e-19 -3.192436e-19
## 2202 -6.743281e-02 1.331053e-02 8.585158e-03
## 2203 6.433850e-03 3.702667e-02 -3.139943e-02
## 2204 -9.651030e-03 -3.564032e-03 -2.294281e-02
## 2205 -1.591673e-03 -6.104050e-03 -1.871600e-02
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## 2207 -1.322221e-03 1.410525e-04 5.576402e-03
## 2208 5.676759e-03 8.024680e-03 1.922142e-02
## 2209 7.358541e-03 -6.621640e-03 2.758642e-03
## 2210 -7.228297e-03 5.162364e-03 1.303314e-02

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## 2214 -1.319493e-02 1.129807e-02 1.144327e-02
## 2215 -3.646597e-03 -1.409606e-02 1.087916e-02
## 2216 -6.439057e-02 2.653319e-02 3.091335e-02
## 2217 2.848273e-03 2.018508e-02 2.079622e-02
## 2218 1.211061e-02 4.505135e-02 -1.217801e-02
## 2219 5.676759e-03 8.024680e-03 1.922142e-02
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## 2221 3.886331e-02 1.596376e-04 -8.529176e-03
## 2222 6.442961e-03 4.076617e-02 -1.417722e-02
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## 2233 -3.952844e-02 9.192352e-03 1.877806e-02
## 2234 -3.015349e-02 3.064718e-03 -4.668236e-03
## 2235 2.272517e-03 1.395661e-02 9.413912e-03
## 2236 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2237 -4.955237e-03 2.318859e-02 1.420957e-02
## 2238 -3.273455e-03 8.542271e-03 -2.253214e-03
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## 2241 3.859438e-03 2.218123e-03 8.659083e-03
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## 2252 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2253 7.358541e-03 -6.621640e-03 2.758642e-03
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## 2255 -9.388427e-02 6.030641e-03 -1.135099e-02
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## 2257 1.128003e-02 2.317618e-02 6.981440e-03
## 2258 -2.861476e-04 -3.119111e-02 -1.770827e-02
## 2259 1.474061e-02 3.073073e-03 -7.897701e-03
## 2260 7.358541e-03 -6.621640e-03 2.758642e-03
## 2261 -1.725574e-03 3.483207e-03 -2.193216e-02
## 2262 5.541220e-03 -1.242820e-02 -7.803698e-03
## 2263 -1.239579e-03 -5.736867e-03 -8.923946e-03
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## 2267  1.633228e-02  9.177123e-03  1.081829e-02
## 2268  7.358541e-03 -6.621640e-03  2.758642e-03
## 2269  5.676759e-03  8.024680e-03  1.922142e-02
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## 2272  3.464170e-02  6.888613e-03 -2.221142e-03
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## 2305  5.676759e-03  8.024680e-03  1.922142e-02
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## 2311 -2.535708e-02 -6.680719e-02 -1.713197e-02
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## 2313 -3.893397e-03  3.850688e-04  4.275971e-03
## 2314  3.723900e-03 -1.823476e-02 -1.836604e-02
## 2315 -1.107013e-02  7.430320e-03  4.517013e-03
## 2316 -1.967930e-03 -1.654478e-02 -1.245489e-03
## 2317  1.146135e-02  9.583135e-03 -6.548631e-03
## 2318 -2.423554e-04 -2.002799e-02  2.068667e-02

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## 2319 -6.514725e-03 -3.295109e-02 2.340207e-02
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## 2322 7.294162e-03 4.244680e-03 -1.148055e-02
## 2323 -1.022723e-03 1.093171e-02 -1.214216e-02
## 2324 1.048669e-02 7.757322e-03 2.265508e-03
## 2325 -1.117584e-03 1.383955e-02 3.565794e-03
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## 2352 6.997366e-04 1.964610e-02 1.412813e-02
## 2353 7.358541e-03 -6.621640e-03 2.758642e-03
## 2354 4.700461e-02 -2.894672e-02 -5.006241e-02
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## 2357 7.815922e-03 -7.003527e-03 3.757345e-02
## 2358 1.614806e-04 2.410357e-02 -2.868403e-02
## 2359 -5.197592e-03 3.160601e-03 3.489624e-02
## 2360 -3.893397e-03 3.850688e-04 4.275971e-03
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## 2362 1.801406e-02 -5.469198e-03 -5.644487e-03
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## 2366 5.676759e-03 8.024680e-03 1.922142e-02
## 2367 6.997366e-04 1.964610e-02 1.412813e-02
## 2368 -4.902614e-02 -1.179949e-02 1.805915e-02
## 2369 -3.749704e-02 -8.154066e-03 -1.320652e-02
## 2370 1.135352e-02 1.604936e-02 3.844285e-02
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## 2372 -1.184706e-03 5.736361e-03 1.289007e-03

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## 2376 -4.955237e-03 2.318859e-02 1.420957e-02
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## 2378 6.997366e-04 1.964610e-02 1.412813e-02
## 2379 2.742167e-03 1.469485e-02 1.095185e-02
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## 2392 -5.710717e-03 -5.421489e-03 -6.286370e-03
## 2393 -1.025915e-01 1.792928e-03 2.266521e-02
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## 2415 6.044465e-02 -2.251315e-03 2.348893e-03
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## 2420 -7.228297e-03 5.162364e-03 1.303314e-02
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## 2422 -4.955237e-03 2.318859e-02 1.420957e-02
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## 2665 -7.080039e-03 2.705634e-02 2.113583e-02
## 2666 5.676759e-03 8.024680e-03 1.922142e-02
## 2667 1.614806e-04 2.410357e-02 -2.868403e-02
## 2668 -1.383270e-03 -3.128516e-03 6.037062e-02
## 2669 -1.447124e-01 2.498815e-02 2.438360e-02
## 2670 7.213867e-02 7.358443e-03 8.047735e-03
## 2671 1.801406e-02 -5.469198e-03 -5.644487e-03
## 2672 3.363564e-03 -2.929264e-02 -3.292556e-02
## 2673 -9.910473e-03 4.637718e-02 2.841914e-02
## 2674 -1.664575e-02 6.367440e-03 -2.736707e-03
## 2675 -6.253125e-03 -2.103857e-02 4.705908e-02
## 2676 5.676759e-03 8.024680e-03 1.922142e-02
## 2677 7.358541e-03 -6.621640e-03 2.758642e-03
## 2678 -3.142641e-03 1.784444e-02 1.384949e-02
## 2679 5.676759e-03 8.024680e-03 1.922142e-02
## 2680 6.442961e-03 4.076617e-02 -1.417722e-02
## 2681 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2682 3.489797e-02 -9.343826e-03 -1.123835e-02
## 2683 2.616006e-04 1.191251e-02 2.365700e-02
## 2684 -1.605378e-02 1.125758e-02 1.307618e-02
## 2685 -5.757633e-03 -3.949101e-03 -2.721878e-02
## 2686 -1.898837e-02 1.792775e-02 4.806601e-03
## 2687 -2.952722e-02 2.120945e-03 6.249785e-04
## 2688 1.303530e-02 1.403040e-03 2.198007e-02
## 2689 6.433850e-03 3.702667e-02 -3.139943e-02
## 2690 -4.955237e-03 2.318859e-02 1.420957e-02
## 2691 -1.151315e-02 -3.348253e-03 -5.019509e-03
## 2692 -8.968375e-02 -3.569732e-03 -2.070438e-02
## 2693 -1.402238e-02 -6.088843e-03 -1.890840e-02
## 2694 2.173664e-02 4.026297e-03 -8.409421e-03
## 2695 -3.893397e-03 3.850688e-04 4.275971e-03
## 2696 7.358541e-03 -6.621640e-03 2.758642e-03

```

```

## 2697 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2698 2.363463e-02 -4.276217e-03 -5.512936e-03
## 2699 -6.514725e-03 -3.295109e-02 2.340207e-02
## 2700 6.997366e-04 1.964610e-02 1.412813e-02
## 2701 3.337395e-03 2.332384e-03 1.584952e-02
## 2702 2.742167e-03 1.469485e-02 1.095185e-02
## 2703 5.676759e-03 8.024680e-03 1.922142e-02
## 2704 -1.580827e-02 -5.464048e-02 6.503103e-03
## 2705 5.251583e-02 -1.437399e-02 2.116172e-02
## 2706 7.358541e-03 -6.621640e-03 2.758642e-03
## 2707 5.745083e-03 -2.429286e-02 -3.526021e-02
## 2708 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2709 2.381519e-03 4.999783e-03 -2.334646e-03
## 2710 -2.880569e-02 3.333422e-02 3.405597e-02
## 2711 1.211061e-02 4.505135e-02 -1.217801e-02
## 2712 5.676759e-03 8.024680e-03 1.922142e-02
## 2713 6.063863e-04 6.113763e-03 2.063271e-02
## 2714 5.676759e-03 8.024680e-03 1.922142e-02
## 2715 -4.643820e-03 1.950622e-04 -1.873146e-02
## 2716 -8.215587e-02 -2.131647e-03 -2.891570e-02
## 2717 -1.582181e-02 -3.927119e-03 -1.568847e-03
## 2718 2.403304e-03 1.656695e-02 1.696821e-02
## 2719 5.676759e-03 8.024680e-03 1.922142e-02
## 2720 1.235296e-02 6.507934e-02 -3.286468e-02
## 2721 7.358541e-03 -6.621640e-03 2.758642e-03
## 2722 -4.955237e-03 2.318859e-02 1.420957e-02
## 2723 5.676759e-03 8.024680e-03 1.922142e-02
## 2724 7.288580e-03 1.384027e-02 1.313878e-02
## 2725 -8.032593e-02 4.739795e-03 3.183385e-03
## 2726 -1.126247e-03 -2.074842e-02 -3.553539e-02
## 2727 -1.053086e-02 2.212571e-02 6.955847e-03
## 2728 -1.014505e-02 4.097561e-03 1.765258e-02
## 2729 1.740305e-02 -5.380131e-03 -2.620739e-03
## 2730 -1.095799e-03 2.540671e-02 2.286865e-02
## 2731 -4.433113e-03 -3.040459e-02 -2.615534e-02
## 2732 7.358541e-03 -6.621640e-03 2.758642e-03
## 2733 -7.167292e-03 -7.166930e-03 -2.596972e-02
## 2734 5.676759e-03 8.024680e-03 1.922142e-02
## 2735 1.637990e-03 -2.580943e-02 -5.485772e-02
## 2736 6.398281e-03 3.923795e-02 5.265242e-02
## 2737 1.802972e-02 7.310402e-02 -1.364325e-02
## 2738 2.403304e-03 1.656695e-02 1.696821e-02
## 2739 1.297910e-02 -5.428660e-03 2.890193e-03
## 2740 -3.721111e-03 3.791011e-03 -1.880722e-02
## 2741 4.573812e-04 -3.818868e-04 3.481481e-02
## 2742 3.420356e-02 -8.449783e-04 7.307728e-03
## 2743 4.497320e-02 -1.160030e-02 -1.807783e-02
## 2744 6.433850e-03 3.702667e-02 -3.139943e-02
## 2745 -2.341232e-02 1.787922e-02 1.031753e-02
## 2746 1.633228e-02 9.177123e-03 1.081829e-02
## 2747 6.443051e-02 1.668018e-02 2.081088e-02
## 2748 7.358541e-03 -6.621640e-03 2.758642e-03
## 2749 5.676759e-03 8.024680e-03 1.922142e-02
## 2750 -2.158709e-03 2.326782e-02 6.837921e-03

```

```

## 2751 -6.894552e-03 -2.194379e-03 -8.842513e-03
## 2752 -1.184706e-03 5.736361e-03 1.289007e-03
## 2753 -4.379221e-05 -1.116311e-02 -3.839494e-02
## 2754 2.232447e-03 2.173729e-02 -3.415607e-03
## 2755 5.676759e-03 8.024680e-03 1.922142e-02
## 2756 7.358541e-03 -6.621640e-03 2.758642e-03
## 2757 5.676759e-03 8.024680e-03 1.922142e-02
## 2758 7.358541e-03 -6.621640e-03 2.758642e-03
## 2759 2.381519e-03 4.999783e-03 -2.334646e-03
## 2760 9.110970e-06 3.739504e-03 1.722221e-02
## 2761 -4.798500e-03 -5.770381e-02 2.379615e-02
## 2762 2.581601e-02 -2.213240e-02 -1.702334e-02
## 2763 -3.273455e-03 8.542271e-03 -2.253214e-03
## 2764 3.886331e-02 1.596376e-04 -8.529176e-03
## 2765 -5.415158e-03 3.887832e-03 4.435580e-03
## 2766 -7.188637e-03 -2.639828e-03 -1.728010e-02
## 2767 3.850114e-02 9.106736e-03 6.437941e-03
## 2768 -2.423554e-04 -2.002799e-02 2.068667e-02
## 2769 -1.596644e-02 -5.476261e-04 -2.064924e-02
## 2770 5.676759e-03 8.024680e-03 1.922142e-02
## 2771 3.886331e-02 1.596376e-04 -8.529176e-03
## 2772 1.801406e-02 -5.469198e-03 -5.644487e-03
## 2773 1.802972e-02 7.310402e-02 -1.364325e-02
## 2774 -1.184706e-03 5.736361e-03 1.289007e-03
## 2775 -3.721111e-03 3.791011e-03 -1.880722e-02
## 2776 5.676759e-03 8.024680e-03 1.922142e-02
## 2777 1.008185e-02 -2.703403e-02 -2.589938e-02
## 2778 5.676759e-03 8.024680e-03 1.922142e-02
## 2779 -4.955237e-03 2.318859e-02 1.420957e-02
## 2780 5.676759e-03 8.024680e-03 1.922142e-02
## 2781 7.358541e-03 -6.621640e-03 2.758642e-03
## 2782 1.128003e-02 2.317618e-02 6.981440e-03
## 2783 2.752925e-03 1.386685e-02 1.446418e-03
## 2784 -9.112774e-03 -8.021498e-03 1.986935e-02
## 2785 -3.721111e-03 3.791011e-03 -1.880722e-02
## 2786 6.997366e-04 1.964610e-02 1.412813e-02
## 2787 5.440542e-03 1.822659e-02 -1.649124e-02
## 2788 6.376495e-03 2.767078e-02 3.334956e-02
## 2789 5.676759e-03 8.024680e-03 1.922142e-02
## 2790 3.414264e-02 -5.301262e-03 3.599192e-02
## 2791 7.358541e-03 -6.621640e-03 2.758642e-03
## 2792 -7.188637e-03 -2.639828e-03 -1.728010e-02
## 2793 4.102202e-02 -2.310818e-02 -1.536710e-02
## 2794 3.606678e-02 8.040839e-05 -1.157529e-03
## 2795 -8.164870e-03 -3.152636e-02 2.986328e-02
## 2796 -4.955237e-03 2.318859e-02 1.420957e-02
## 2797 -5.757633e-03 -3.949101e-03 -2.721878e-02
## 2798 7.949276e-03 2.198129e-02 2.863534e-02
## 2799 2.525047e-02 -5.587818e-03 -3.803588e-03
## 2800 6.281228e-04 1.773460e-02 8.372678e-03

```

Prep the K-Fold cross validation

```
# K Fold Cross Validation using the package caret
# Create folds for 10-fold cross validation
set.seed(48743)
cv.folds <- createMultiFolds(train_svd$Label, k = 10, times = 2)

# basically this will create 20 random samples
cv.cntrl <- trainControl(method = "repeatedcv", number = 10,
                        repeats = 2, index = cv.folds)
```

Speed up processing, This reduces run time from 30+ minutes to 2 minutes.

Note: this does not benefit if ran on Rstudio Cloud. Only speeds up processing if ran from desktop version of Rstudio, or on a VM with multiple cores.

```
# Speed up processing in order to scale
# Create a cluster to work on 3 logical cores
# essentially 3 instances of Rstudio for processing
cl <- makeCluster(3, type = "SOCK")

# register the instance for faster processing
registerDoSNOW(cl)
```

Train the svmRadial Model using the previously defined Training data, then end the cluster

```
# set seed for consistency
set.seed(12345)

# Train the Training Data
SVM_RB <- train(
  Label ~., data = train_svd, method = "svmLinear",
  trControl = cv.cntrl,
  preProcess = c("center", "scale"))

# Processing is done, stop cluster.
on.exit(stopCluster(cl))
```

Review the prediction results based on training data.

This output will be compared to the test data output. A large discrepancy would suggest overfilling, or issues relating to the samples taken.

```
# Review Results from Training data
preds <- predict(SVM_RB, train_svd)
confusionMatrix(preds, train_svd$Label)
```

```
## Confusion Matrix and Statistics
##
##           Reference
## Prediction    0    1
##           0 1396    5
##           1    4 1395
##
##           Accuracy : 0.9968
##           95% CI : (0.9939, 0.9985)
##       No Information Rate : 0.5
##       P-Value [Acc > NIR] : <2e-16
##
##           Kappa : 0.9936
##
## Mcnemar's Test P-Value : 1
##
##           Sensitivity : 0.9971
##           Specificity : 0.9964
##       Pos Pred Value : 0.9964
##       Neg Pred Value : 0.9971
##           Prevalence : 0.5000
##       Detection Rate : 0.4986
##       Detection Prevalence : 0.5004
##       Balanced Accuracy : 0.9968
##
##       'Positive' Class : 0
##
```

Above are fantastic results, proceed cautiously, watch for signs of over fitting.

Apply the Model to the Testing Data

30% of the labeled data was with held, Now I'm going to use that data to test the model for accuracy.

Tokenize and clean the testing data as we did with the training data

```
bos_b_twts_test_token <- tokens(bos_b_twts_test$text, what = "word",
                                remove_numbers = TRUE, remove_punct = TRUE,
                                remove_symbols = TRUE, split_hyphens = TRUE) %>%
  tokens_tolower()

# Further clean the text by removing stop words and stemming
# Only use words with a frequency of 2.5% across 2+ tweets
bos_b_twts_test_dfm<-bos_b_twts_test_token %>%
  tokens_remove(stopwords(source = "smart")) %>%
  tokens_wordstem() %>%
  dfm() %>%
  dfm_trim( min_termfreq = round(nrow(bos_b_twts_test)*.02, 0),
            min_docfreq = 2) %>%
  dfm_tfidf()
```


Match data formats (testing vs training)

```
# Use quanteda to make sure training and testing data have exact same format
bos_b_twts_test_dfm <- dfm_select(bos_b_twts_test_dfm,
                                pattern = bos_b_twts_train_dfm,
                                selection = "keep")
bos_b_twts_test_matrix <- as.matrix(bos_b_twts_test_dfm)
```

Prep the data further

```
# taking the transpose of the singular matrix
sigma.inverse <- 1 / train_lsa$d

# transpose of the term matrix
u.transpose <- t(train_lsa$u)
test_svd <- t(sigma.inverse * u.transpose %*% t(bos_b_twts_test_dfm))
test_svd<-as.matrix(test_svd)

# Build the test data frame to feed into our trained machine learning model
# for predictions.
test_svd <- data.frame(Label = bos_b_twts_test$label,
                       ReviewLength= nchar(bos_b_twts_test$text),
                       test_svd)
```

Make predictions and output a confusion matrix and measures to assess the quality of the models performance on the testing data

```
# Make predictions on the test data set using our trained SVM.
preds <- predict(SVM_RB, test_svd)
confusionMatrix(preds, test_svd$Label)
```

```
## Confusion Matrix and Statistics
##
##           Reference
## Prediction  0    1
##           0 600    6
##           1    0 594
##
##           Accuracy : 0.995
##           95% CI : (0.9891, 0.9982)
##           No Information Rate : 0.5
##           P-Value [Acc > NIR] : < 2e-16
##
##           Kappa : 0.99
##
##           Mcnemar's Test P-Value : 0.04123
##
```

```
##           Sensitivity : 1.0000
##           Specificity : 0.9900
##           Pos Pred Value : 0.9901
##           Neg Pred Value : 1.0000
##           Prevalence : 0.5000
##           Detection Rate : 0.5000
##           Detection Prevalence : 0.5050
##           Balanced Accuracy : 0.9950
##
##           'Positive' Class : 0
##
```

Consistent accuracy across training and test indicates the model is performing well and is not over-fit. Also, experimented with different sample sizes and sampling methods which all produced similar results. I am comfortable that the model is not over fit.

Apply the model to the entire data set in preparation for submission.

the original data source was saved as raw, we will now prep that data as we

already have with the training and testing data

and applying our predictions

```
# the original data source was saved as raw, we will now prep that data
# and applying our predictions
bos_b_twts_apply_token <- tokens(bos_b_twts_raw$text, what = "word",
                                remove_numbers = TRUE,
                                remove_punct = TRUE,
                                remove_symbols = TRUE,
                                split_hyphens = TRUE) %>%

  tokens_tolower()

# Further clean the text by removing stop words and stemming
# Only use words with a frequency of 2.5% across 2+ tweets
bos_b_twts_apply_dfm <- bos_b_twts_apply_token %>%
  tokens_remove(stopwords(source = "smart")) %>%
  tokens_wordstem() %>%
  dfm() %>%
  dfm_trim(min_termfreq = round(nrow(bos_b_twts_raw)*.02, 0),
           min_docfreq = 2) %>%
  dfm_tfidf()
```

Use quanteda to make sure training and raw data have exact same format as the training set

```
# Use quanteda to make sure training and raw data have exact same format
bos_b_twts_apply_dfm <- dfm_select(bos_b_twts_apply_dfm,
                                  pattern = bos_b_twts_train_dfm,
                                  selection = "keep")
bos_b_twts_apply_matrix <- as.matrix(bos_b_twts_apply_dfm)
```

Prepare the data further

```
# taking the transpose of the singular matrix
sigma.inverse <- 1 / train_lsa$d

# transpose of the term matrix
u.transpose <- t(train_lsa$u)
apply_svd <- t(sigma.inverse * u.transpose %*% t(bos_b_twts_apply_dfm))
apply_svd <- as.matrix(apply_svd)

# Lastly, we can build the apply data frame to feed into our trained machine
# learning model for predictions.
apply_svd <- data.frame(Label = bos_b_twts_raw$label,
                        ReviewLength= nchar(bos_b_twts_raw$text),
                        apply_svd)
```

Make Predictions, apply to the original data as a new column called “preds”

```
# Now we can make predictions on the apply data set using our trained SVM.
preds <- predict(SVM_RB, apply_svd)
bos_b_twts_raw$preds <- preds
```

Write to a csv with a time stamp, and output the total time the code took to execute

```
# Get the current time
systime <- format(Sys.time(), "%Y-%m-%d-%H-%M-%S")

# write the original tweets plus the prediction to a csv with a time stamp
write.csv(data.frame(bos_b_twts_raw), file = paste("Boston_B_Tweet_Predictions_", systime, ".csv", sep = "_"), as.is = TRUE)

# Time it took to run the code from beginning to end
# Note that the packages were pre-loaded
total.time <- Sys.time() - start.time
total.time

## Time difference of 26.65086 secs
```