

```
1 ssh://sangsq@10.50.221.195:22/home/sangsq/anaconda3/bin/
  python -u /home/sangsq/flower/PSEP/model/main.py
2 loading data
3 remove 0 isolated drugs: []
4 remove finished
5 963 polypharmacy side effects
6 data has been loaded
7 cuda
8 model training ...
9   0    loss:1.3870    auprc:0.4958    auroc:0.5002    ap@50:0.
  4964
10   0    loss:1.3870    auprc:0.4986    auroc:0.5017    ap@50:0.
  5025    time:128.4
11
12   1    loss:1.3864    auprc:0.4938    auroc:0.5008    ap@50:0.
  4944
13   1    loss:1.3864    auprc:0.4961    auroc:0.5011    ap@50:0.
  4999    time:122.5
14
15   2    loss:1.3861    auprc:0.4942    auroc:0.5038    ap@50:0.
  4947
16   2    loss:1.3861    auprc:0.4966    auroc:0.5049    ap@50:0.
  5004    time:121.6
17
18   3    loss:1.3855    auprc:0.5043    auroc:0.5128    ap@50:0.
  5048
19   3    loss:1.3855    auprc:0.5079    auroc:0.5159    ap@50:0.
  5115    time:121.6
20
21   4    loss:1.3843    auprc:0.5251    auroc:0.5263    ap@50:0.
  5256
22   4    loss:1.3843    auprc:0.5302    auroc:0.5319    ap@50:0.
  5336    time:121.1
23
24   5    loss:1.3819    auprc:0.5502    auroc:0.5429    ap@50:0.
  5506
25   5    loss:1.3819    auprc:0.5571    auroc:0.5508    ap@50:0.
  5600    time:120.6
26
27   6    loss:1.3774    auprc:0.5766    auroc:0.5635    ap@50:0.
  5770
28   6    loss:1.3774    auprc:0.5854    auroc:0.5741    ap@50:0.
  5879    time:120.8
29
30   7    loss:1.3694    auprc:0.6035    auroc:0.5886    ap@50:0.
  6038
31   7    loss:1.3694    auprc:0.6140    auroc:0.6017    ap@50:0.
  6163    time:121.9
32
33   8    loss:1.3560    auprc:0.6301    auroc:0.6175    ap@50:0.
  6304
```

34	8	loss:1.3560 6450	auprc:0.6428 time:121.0	auroc:0.6333	ap@50:0.
35					
36	9	loss:1.3351 6564	auprc:0.6561	auroc:0.6497	ap@50:0.
37	9	loss:1.3351 6733	auprc:0.6712 time:122.4	auroc:0.6679	ap@50:0.
38					
39	10	loss:1.3037 6816	auprc:0.6813	auroc:0.6841	ap@50:0.
40	10	loss:1.3037 7003	auprc:0.6983 time:121.3	auroc:0.7036	ap@50:0.
41					
42	11	loss:1.2601 7076	auprc:0.7073	auroc:0.7187	ap@50:0.
43	11	loss:1.2601 7266	auprc:0.7248 time:120.9	auroc:0.7387	ap@50:0.
44					
45	12	loss:1.2061 7342	auprc:0.7339	auroc:0.7519	ap@50:0.
46	12	loss:1.2061 7536	auprc:0.7518 time:121.4	auroc:0.7718	ap@50:0.
47					
48	13	loss:1.1481 7646	auprc:0.7644	auroc:0.7846	ap@50:0.
49	13	loss:1.1481 7829	auprc:0.7813 time:120.7	auroc:0.8028	ap@50:0.
50					
51	14	loss:1.0845 7931	auprc:0.7929	auroc:0.8134	ap@50:0.
52	14	loss:1.0845 8105	auprc:0.8090 time:122.7	auroc:0.8307	ap@50:0.
53					
54	15	loss:1.0194 8164	auprc:0.8162	auroc:0.8375	ap@50:0.
55	15	loss:1.0194 8336	auprc:0.8323 time:122.2	auroc:0.8539	ap@50:0.
56					
57	16	loss:0.9587 8400	auprc:0.8398	auroc:0.8601	ap@50:0.
58	16	loss:0.9587 8561	auprc:0.8550 time:121.7	auroc:0.8751	ap@50:0.
59					
60	17	loss:0.9017 8640	auprc:0.8639	auroc:0.8824	ap@50:0.
61	17	loss:0.9017 8792	auprc:0.8782 time:121.2	auroc:0.8960	ap@50:0.
62					
63	18	loss:0.8517 8852	auprc:0.8850	auroc:0.9018	ap@50:0.
64	18	loss:0.8517	auprc:0.8975	auroc:0.9132	ap@50:0.

64	8983	time:121.9			
65					
66	19	loss:0.8065	auprc:0.8997	auroc:0.9155	ap@50:0.
	8998				
67	19	loss:0.8065	auprc:0.9102	auroc:0.9245	ap@50:0.
	9108	time:120.3			
68					
69	20	loss:0.7712	auprc:0.9106	auroc:0.9258	ap@50:0.
	9107				
70	20	loss:0.7712	auprc:0.9195	auroc:0.9330	ap@50:0.
	9201	time:120.8			
71					
72	21	loss:0.7451	auprc:0.9176	auroc:0.9330	ap@50:0.
	9177				
73	21	loss:0.7451	auprc:0.9250	auroc:0.9387	ap@50:0.
	9255	time:120.9			
74					
75	22	loss:0.7142	auprc:0.9246	auroc:0.9393	ap@50:0.
	9247				
76	22	loss:0.7142	auprc:0.9309	auroc:0.9436	ap@50:0.
	9313	time:121.8			
77					
78	23	loss:0.6885	auprc:0.9290	auroc:0.9434	ap@50:0.
	9291				
79	23	loss:0.6885	auprc:0.9342	auroc:0.9466	ap@50:0.
	9346	time:121.3			
80					
81	24	loss:0.6756	auprc:0.9316	auroc:0.9460	ap@50:0.
	9317				
82	24	loss:0.6756	auprc:0.9362	auroc:0.9486	ap@50:0.
	9366	time:120.7			
83					
84	25	loss:0.6543	auprc:0.9347	auroc:0.9484	ap@50:0.
	9348				
85	25	loss:0.6543	auprc:0.9387	auroc:0.9503	ap@50:0.
	9391	time:120.7			
86					
87	26	loss:0.6452	auprc:0.9368	auroc:0.9498	ap@50:0.
	9368				
88	26	loss:0.6452	auprc:0.9402	auroc:0.9514	ap@50:0.
	9405	time:120.9			
89					
90	27	loss:0.6325	auprc:0.9378	auroc:0.9508	ap@50:0.
	9379				
91	27	loss:0.6325	auprc:0.9408	auroc:0.9522	ap@50:0.
	9412	time:119.9			
92					
93	28	loss:0.6228	auprc:0.9392	auroc:0.9518	ap@50:0.
	9393				
94	28	loss:0.6228	auprc:0.9417	auroc:0.9529	ap@50:0.
	9421	time:120.1			

95					
96	29	loss:0.6171	auprc:0.9404	auroc:0.9526	ap@50:0.
	9404				
97	29	loss:0.6171	auprc:0.9428	auroc:0.9537	ap@50:0.
	9431	time:122.8			
98					
99	30	loss:0.6102	auprc:0.9413	auroc:0.9533	ap@50:0.
	9413				
100	30	loss:0.6102	auprc:0.9432	auroc:0.9542	ap@50:0.
	9436	time:124.3			
101					
102	31	loss:0.6079	auprc:0.9413	auroc:0.9535	ap@50:0.
	9414				
103	31	loss:0.6079	auprc:0.9434	auroc:0.9544	ap@50:0.
	9438	time:123.6			
104					
105	32	loss:0.6027	auprc:0.9420	auroc:0.9540	ap@50:0.
	9420				
106	32	loss:0.6027	auprc:0.9438	auroc:0.9547	ap@50:0.
	9442	time:124.6			
107					
108	33	loss:0.6017	auprc:0.9425	auroc:0.9544	ap@50:0.
	9425				
109	33	loss:0.6017	auprc:0.9442	auroc:0.9550	ap@50:0.
	9445	time:123.1			
110					
111	34	loss:0.5978	auprc:0.9423	auroc:0.9544	ap@50:0.
	9424				
112	34	loss:0.5978	auprc:0.9443	auroc:0.9551	ap@50:0.
	9446	time:123.7			
113					
114	35	loss:0.5971	auprc:0.9422	auroc:0.9544	ap@50:0.
	9423				
115	35	loss:0.5971	auprc:0.9442	auroc:0.9551	ap@50:0.
	9445	time:123.6			
116					
117	36	loss:0.5942	auprc:0.9425	auroc:0.9546	ap@50:0.
	9425				
118	36	loss:0.5942	auprc:0.9443	auroc:0.9553	ap@50:0.
	9447	time:123.5			
119					
120	37	loss:0.5938	auprc:0.9425	auroc:0.9548	ap@50:0.
	9426				
121	37	loss:0.5938	auprc:0.9446	auroc:0.9555	ap@50:0.
	9449	time:123.6			
122					
123	38	loss:0.5906	auprc:0.9428	auroc:0.9549	ap@50:0.
	9429				
124	38	loss:0.5906	auprc:0.9445	auroc:0.9556	ap@50:0.
	9449	time:123.7			
125					

126	39	loss:0.5906	auprc:0.9428	auroc:0.9549	ap@50:0.
	9428				
127	39	loss:0.5906	auprc:0.9445	auroc:0.9556	ap@50:0.
	9449	time:123.1			
128					
129	40	loss:0.5885	auprc:0.9431	auroc:0.9552	ap@50:0.
	9432				
130	40	loss:0.5885	auprc:0.9448	auroc:0.9559	ap@50:0.
	9452	time:123.6			
131					
132	41	loss:0.5877	auprc:0.9434	auroc:0.9555	ap@50:0.
	9434				
133	41	loss:0.5877	auprc:0.9450	auroc:0.9560	ap@50:0.
	9454	time:123.6			
134					
135	42	loss:0.5865	auprc:0.9431	auroc:0.9553	ap@50:0.
	9431				
136	42	loss:0.5865	auprc:0.9449	auroc:0.9560	ap@50:0.
	9452	time:123.1			
137					
138	43	loss:0.5851	auprc:0.9431	auroc:0.9554	ap@50:0.
	9432				
139	43	loss:0.5851	auprc:0.9449	auroc:0.9560	ap@50:0.
	9453	time:123.1			
140					
141	44	loss:0.5846	auprc:0.9436	auroc:0.9557	ap@50:0.
	9436				
142	44	loss:0.5846	auprc:0.9452	auroc:0.9562	ap@50:0.
	9455	time:123.1			
143					
144	45	loss:0.5841	auprc:0.9434	auroc:0.9556	ap@50:0.
	9435				
145	45	loss:0.5841	auprc:0.9452	auroc:0.9563	ap@50:0.
	9455	time:124.1			
146					
147	46	loss:0.5837	auprc:0.9433	auroc:0.9556	ap@50:0.
	9433				
148	46	loss:0.5837	auprc:0.9451	auroc:0.9562	ap@50:0.
	9454	time:124.8			
149					
150	47	loss:0.5823	auprc:0.9436	auroc:0.9558	ap@50:0.
	9437				
151	47	loss:0.5823	auprc:0.9452	auroc:0.9564	ap@50:0.
	9456	time:123.1			
152					
153	48	loss:0.5823	auprc:0.9436	auroc:0.9558	ap@50:0.
	9437				
154	48	loss:0.5823	auprc:0.9453	auroc:0.9565	ap@50:0.
	9457	time:123.7			
155					
156	49	loss:0.5811	auprc:0.9438	auroc:0.9559	ap@50:0.

156	9439				
157	49	loss:0.5811	auprc:0.9452	auroc:0.9564	ap@50:0.
	9456	time:123.6			
158					
159	50	loss:0.5811	auprc:0.9433	auroc:0.9557	ap@50:0.
	9434				
160	50	loss:0.5811	auprc:0.9452	auroc:0.9564	ap@50:0.
	9456	time:123.7			
161					
162	51	loss:0.5807	auprc:0.9437	auroc:0.9559	ap@50:0.
	9437				
163	51	loss:0.5807	auprc:0.9454	auroc:0.9565	ap@50:0.
	9457	time:123.5			
164					
165	52	loss:0.5801	auprc:0.9434	auroc:0.9558	ap@50:0.
	9434				
166	52	loss:0.5801	auprc:0.9453	auroc:0.9565	ap@50:0.
	9456	time:123.1			
167					
168	53	loss:0.5793	auprc:0.9437	auroc:0.9560	ap@50:0.
	9437				
169	53	loss:0.5793	auprc:0.9453	auroc:0.9565	ap@50:0.
	9456	time:123.2			
170					
171	54	loss:0.5788	auprc:0.9438	auroc:0.9560	ap@50:0.
	9438				
172	54	loss:0.5788	auprc:0.9455	auroc:0.9566	ap@50:0.
	9458	time:123.2			
173					
174	55	loss:0.5783	auprc:0.9436	auroc:0.9559	ap@50:0.
	9437				
175	55	loss:0.5783	auprc:0.9454	auroc:0.9566	ap@50:0.
	9457	time:123.0			
176					
177	56	loss:0.5784	auprc:0.9435	auroc:0.9559	ap@50:0.
	9435				
178	56	loss:0.5784	auprc:0.9453	auroc:0.9565	ap@50:0.
	9456	time:123.8			
179					
180	57	loss:0.5780	auprc:0.9436	auroc:0.9560	ap@50:0.
	9436				
181	57	loss:0.5780	auprc:0.9454	auroc:0.9566	ap@50:0.
	9457	time:124.1			
182					
183	58	loss:0.5775	auprc:0.9438	auroc:0.9561	ap@50:0.
	9438				
184	58	loss:0.5775	auprc:0.9453	auroc:0.9566	ap@50:0.
	9457	time:123.6			
185					
186	59	loss:0.5777	auprc:0.9436	auroc:0.9560	ap@50:0.
	9436				

187	59	loss:0.5777 9456	auprc:0.9452 time:126.2	auroc:0.9566	ap@50:0.
188	60	loss:0.5768 9439	auprc:0.9438	auroc:0.9561	ap@50:0.
190	60	loss:0.5768 9458	auprc:0.9454 time:123.7	auroc:0.9567	ap@50:0.
191	61	loss:0.5764 9438	auprc:0.9437	auroc:0.9561	ap@50:0.
193	61	loss:0.5764 9457	auprc:0.9454 time:123.7	auroc:0.9567	ap@50:0.
194	62	loss:0.5767 9436	auprc:0.9435	auroc:0.9560	ap@50:0.
196	62	loss:0.5767 9457	auprc:0.9454 time:124.2	auroc:0.9567	ap@50:0.
197	63	loss:0.5765 9439	auprc:0.9438	auroc:0.9561	ap@50:0.
199	63	loss:0.5765 9459	auprc:0.9455 time:123.1	auroc:0.9567	ap@50:0.
200	64	loss:0.5762 9437	auprc:0.9436	auroc:0.9560	ap@50:0.
202	64	loss:0.5762 9457	auprc:0.9454 time:124.1	auroc:0.9567	ap@50:0.
203	65	loss:0.5755 9438	auprc:0.9437	auroc:0.9561	ap@50:0.
205	65	loss:0.5755 9458	auprc:0.9454 time:124.5	auroc:0.9567	ap@50:0.
206	66	loss:0.5757 9439	auprc:0.9439	auroc:0.9562	ap@50:0.
208	66	loss:0.5757 9459	auprc:0.9455 time:124.6	auroc:0.9568	ap@50:0.
209	67	loss:0.5751 9437	auprc:0.9437	auroc:0.9561	ap@50:0.
211	67	loss:0.5751 9458	auprc:0.9454 time:124.6	auroc:0.9567	ap@50:0.
212	68	loss:0.5744 9440	auprc:0.9440	auroc:0.9563	ap@50:0.
214	68	loss:0.5744 9459	auprc:0.9455 time:123.0	auroc:0.9568	ap@50:0.
215	69	loss:0.5745 9438	auprc:0.9437	auroc:0.9561	ap@50:0.
217	69	loss:0.5745 9438	auprc:0.9455	auroc:0.9568	ap@50:0.

217	9458	time:123.6			
218					
219	70	loss:0.5740	auprc:0.9440	auroc:0.9562	ap@50:0.
	9440				
220	70	loss:0.5740	auprc:0.9456	auroc:0.9568	ap@50:0.
	9459	time:125.1			
221					
222	71	loss:0.5740	auprc:0.9438	auroc:0.9562	ap@50:0.
	9439				
223	71	loss:0.5740	auprc:0.9456	auroc:0.9568	ap@50:0.
	9459	time:123.7			
224					
225	72	loss:0.5737	auprc:0.9441	auroc:0.9564	ap@50:0.
	9442				
226	72	loss:0.5737	auprc:0.9456	auroc:0.9568	ap@50:0.
	9459	time:124.0			
227					
228	73	loss:0.5738	auprc:0.9440	auroc:0.9562	ap@50:0.
	9440				
229	73	loss:0.5738	auprc:0.9457	auroc:0.9569	ap@50:0.
	9460	time:124.1			
230					
231	74	loss:0.5739	auprc:0.9437	auroc:0.9561	ap@50:0.
	9438				
232	74	loss:0.5739	auprc:0.9456	auroc:0.9569	ap@50:0.
	9460	time:124.1			
233					
234	75	loss:0.5733	auprc:0.9442	auroc:0.9564	ap@50:0.
	9443				
235	75	loss:0.5733	auprc:0.9458	auroc:0.9570	ap@50:0.
	9461	time:124.1			
236					
237	76	loss:0.5738	auprc:0.9438	auroc:0.9562	ap@50:0.
	9438				
238	76	loss:0.5738	auprc:0.9455	auroc:0.9568	ap@50:0.
	9459	time:123.6			
239					
240	77	loss:0.5750	auprc:0.9440	auroc:0.9563	ap@50:0.
	9441				
241	77	loss:0.5750	auprc:0.9459	auroc:0.9570	ap@50:0.
	9463	time:124.1			
242					
243	78	loss:0.5778	auprc:0.9438	auroc:0.9561	ap@50:0.
	9438				
244	78	loss:0.5778	auprc:0.9453	auroc:0.9567	ap@50:0.
	9456	time:123.6			
245					
246	79	loss:0.5824	auprc:0.9445	auroc:0.9566	ap@50:0.
	9445				
247	79	loss:0.5824	auprc:0.9461	auroc:0.9571	ap@50:0.
	9465	time:123.6			

248					
249	80	loss:0.5836	auprc:0.9433	auroc:0.9560	ap@50:0.
	9434				
250	80	loss:0.5836	auprc:0.9450	auroc:0.9566	ap@50:0.
	9454	time:123.5			
251					
252	81	loss:0.5752	auprc:0.9441	auroc:0.9564	ap@50:0.
	9442				
253	81	loss:0.5752	auprc:0.9459	auroc:0.9571	ap@50:0.
	9463	time:124.1			
254					
255	82	loss:0.5735	auprc:0.9441	auroc:0.9564	ap@50:0.
	9441				
256	82	loss:0.5735	auprc:0.9459	auroc:0.9571	ap@50:0.
	9462	time:123.6			
257					
258	83	loss:0.5790	auprc:0.9436	auroc:0.9561	ap@50:0.
	9436				
259	83	loss:0.5790	auprc:0.9452	auroc:0.9567	ap@50:0.
	9456	time:123.6			
260					
261	84	loss:0.5747	auprc:0.9442	auroc:0.9564	ap@50:0.
	9442				
262	84	loss:0.5747	auprc:0.9460	auroc:0.9572	ap@50:0.
	9464	time:124.6			
263					
264	85	loss:0.5728	auprc:0.9443	auroc:0.9565	ap@50:0.
	9443				
265	85	loss:0.5728	auprc:0.9459	auroc:0.9571	ap@50:0.
	9463	time:124.5			
266					
267	86	loss:0.5763	auprc:0.9438	auroc:0.9562	ap@50:0.
	9438				
268	86	loss:0.5763	auprc:0.9453	auroc:0.9568	ap@50:0.
	9457	time:123.0			
269					
270	87	loss:0.5723	auprc:0.9445	auroc:0.9566	ap@50:0.
	9445				
271	87	loss:0.5723	auprc:0.9460	auroc:0.9572	ap@50:0.
	9463	time:123.6			
272					
273	88	loss:0.5731	auprc:0.9442	auroc:0.9565	ap@50:0.
	9443				
274	88	loss:0.5731	auprc:0.9460	auroc:0.9572	ap@50:0.
	9464	time:123.6			
275					
276	89	loss:0.5745	auprc:0.9437	auroc:0.9562	ap@50:0.
	9437				
277	89	loss:0.5745	auprc:0.9455	auroc:0.9569	ap@50:0.
	9459	time:124.1			
278					

279	90	loss:0.5717 9440	auprc:0.9439	auroc:0.9564	ap@50:0.
280	90	loss:0.5717 9463	auprc:0.9459 time:123.5	auroc:0.9572	ap@50:0.
281					
282	91	loss:0.5731 9443	auprc:0.9443	auroc:0.9566	ap@50:0.
283	91	loss:0.5731 9465	auprc:0.9461 time:123.5	auroc:0.9573	ap@50:0.
284					
285	92	loss:0.5728 9441	auprc:0.9440	auroc:0.9564	ap@50:0.
286	92	loss:0.5728 9460	auprc:0.9456 time:123.5	auroc:0.9571	ap@50:0.
287					
288	93	loss:0.5705 9443	auprc:0.9442	auroc:0.9566	ap@50:0.
289	93	loss:0.5705 9462	auprc:0.9458 time:122.9	auroc:0.9572	ap@50:0.
290					
291	94	loss:0.5722 9446	auprc:0.9445	auroc:0.9567	ap@50:0.
292	94	loss:0.5722 9465	auprc:0.9461 time:123.4	auroc:0.9573	ap@50:0.
293					
294	95	loss:0.5705 9441	auprc:0.9441	auroc:0.9565	ap@50:0.
295	95	loss:0.5705 9462	auprc:0.9458 time:124.0	auroc:0.9572	ap@50:0.
296					
297	96	loss:0.5706 9443	auprc:0.9442	auroc:0.9566	ap@50:0.
298	96	loss:0.5706 9462	auprc:0.9459 time:124.0	auroc:0.9572	ap@50:0.
299					
300	97	loss:0.5713 9446	auprc:0.9445	auroc:0.9568	ap@50:0.
301	97	loss:0.5713 9466	auprc:0.9463 time:123.0	auroc:0.9574	ap@50:0.
302					
303	98	loss:0.5694 9443	auprc:0.9443	auroc:0.9567	ap@50:0.
304	98	loss:0.5694 9464	auprc:0.9460 time:124.0	auroc:0.9573	ap@50:0.
305					
306	99	loss:0.5700 9443	auprc:0.9443	auroc:0.9566	ap@50:0.
307	99	loss:0.5700 9464	auprc:0.9460 time:123.5	auroc:0.9573	ap@50:0.
308					
309	File: /home/sangsq/flower/PSEP/model/main.py				

```

310 Function: train at line 189
311
312 Line # Max usage Peak usage diff max diff peak Line
   Contents
313 =====
=====
314     189                                     @profile
315     190                                     def train
316     ():

317     191    345.06M      364.00M    59.55M    62.00M    model
   .train()
318     192
319     193    345.06M      364.00M    0.00B     0.00B
   optimizer.zero_grad()
320     194    1.33G       5.29G 1013.03M    4.94G      z =
   model.encoder(data.d_feat, data.dd_train_idx, data.
   dd_train_et, data.dd_train_range, data.d_norm, data.p_feat
   , data.pp_train_indices, data.dp_edge_index, data.
   dp_range_list)
321     195
322     196    1.33G       1.34G     0.00B    -3.95G
   pos_index = data.dd_train_idx
323     197    1.45G       1.59G 126.00M  254.00M
   neg_index = negative_sampling(data.dd_train_idx, data.
   n_drug).to(device)
324     198
325     199    1.48G       2.94G 31.42M    1.35G
   pos_score = checkpoint(model.decoder, z, pos_index, data.
   dd_train_et)
326     200    1.51G       3.43G 31.42M  504.00M
   neg_score = checkpoint(model.decoder, z, neg_index, data.
   dd_train_et)
327     201
328     202                                     #
   pos_loss = F.binary_cross_entropy(pos_score, torch.ones(
   pos_score.shape[0]).cuda())
329     203                                     #
   neg_loss = F.binary_cross_entropy(neg_score, torch.ones(
   neg_score.shape[0]).cuda())
330     204    1.54G       1.96G 31.42M    -1.48G
   pos_loss = -torch.log(pos_score + EPS).mean()
331     205    1.57G       1.96G 31.42M    0.00B
   neg_loss = -torch.log(1 - neg_score + EPS).mean()
332     206    1.57G       1.96G 512.00B    0.00B    loss
   = pos_loss + neg_loss
333     207                                     #
   loss = pos_loss
334     208
335     209    533.95M      9.84G    -1.05G    7.88G    loss.
   backward()
336     210    533.95M      994.00M   0.00B    -8.87G

```

File - main

```
335 optimizer.step()
336     211
337     212    533.95M      994.00M      0.00B      0.00B
338     213    534.34M      996.00M    401.50K      2.00M      for i
339     214    534.34M      996.00M      0.00B      0.00B
340     215    534.34M      996.00M      0.00B      0.00B
341     216    534.34M      996.00M      0.00B      0.00B
342     217
343     218    534.34M      996.00M      0.00B      0.00B
344     219    534.34M      996.00M      0.00B      0.00B
345     220
346     221    534.34M      996.00M      0.00B      0.00B
347     222    534.34M      996.00M      0.00B      0.00B
348     223
349     224    534.34M      996.00M      0.00B      0.00B
350     225    534.34M      996.00M      0.00B      0.00B
351     226
352     227    533.96M      994.00M   -394.00K      -2.00M
353     228    533.96M      994.00M      0.00B      0.00B      [
354     229    533.96M      994.00M      0.00B      0.00B
355     230
356     231    533.96M      994.00M      0.00B      0.00B      print
357     232    533.96M      994.00M      0.00B      0.00B
358     233    345.06M      994.00M   -188.90M      0.00B
359     234    533.96M      994.00M      0.00B      0.00B
360
361
362 Process finished with exit code 0
363
```