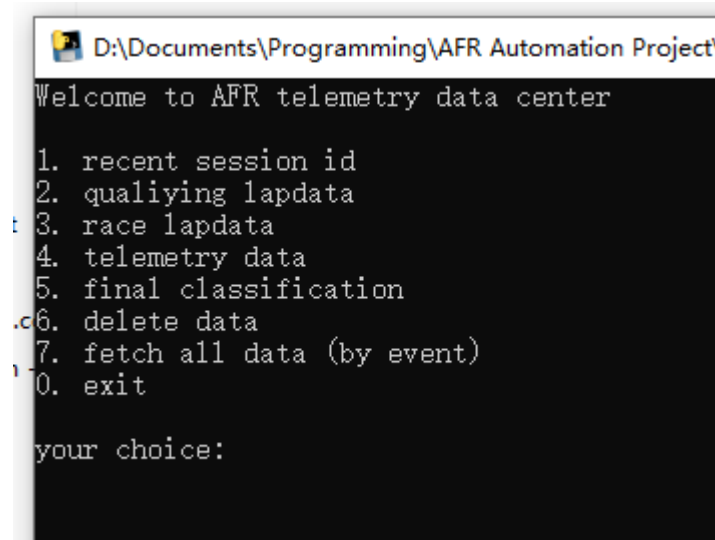


遥测数据抓取

进入“tele_data”文件夹，打开“tele.exe”，如下图

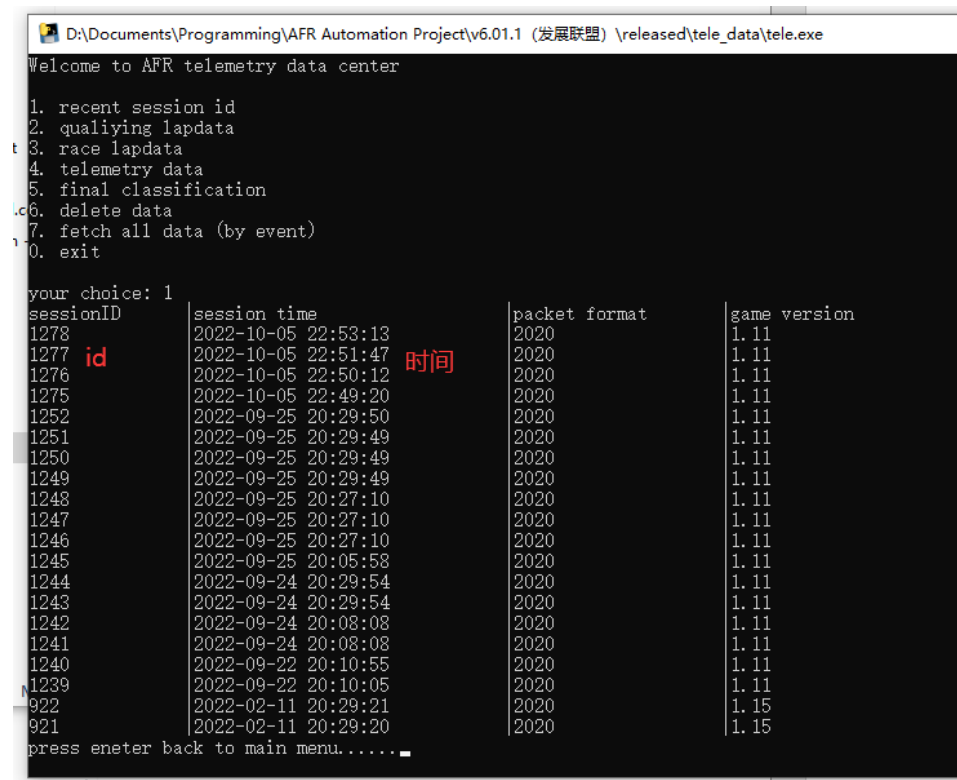


```
D:\Documents\Programming\AFR Automation Project
Welcome to AFR telemetry data center

1. recent session id
2. qualifying lapdata
3. race lapdata
4. telemetry data
5. final classification
6. delete data
7. fetch all data (by event)
0. exit

your choice:
```

在这里我们只需要用到 1 和 5，首先先用 1 查看 sessionid



```
D:\Documents\Programming\AFR Automation Project\v6.01.1 (发展联盟) \released\tele_data\tele.exe
Welcome to AFR telemetry data center

1. recent session id
2. qualifying lapdata
3. race lapdata
4. telemetry data
5. final classification
6. delete data
7. fetch all data (by event)
0. exit

your choice: 1
sessionID | session time | packet format | game version
1278 | 2022-10-05 22:53:13 | 2020 | 1.11
1277 id | 2022-10-05 22:51:47 | 2020 | 1.11
1276 | 2022-10-05 22:50:12 | 2020 | 1.11
1275 | 2022-10-05 22:49:20 | 2020 | 1.11
1252 | 2022-09-25 20:29:50 | 2020 | 1.11
1251 | 2022-09-25 20:29:49 | 2020 | 1.11
1250 | 2022-09-25 20:29:49 | 2020 | 1.11
1249 | 2022-09-25 20:29:49 | 2020 | 1.11
1248 | 2022-09-25 20:27:10 | 2020 | 1.11
1247 | 2022-09-25 20:27:10 | 2020 | 1.11
1246 | 2022-09-25 20:27:10 | 2020 | 1.11
1245 | 2022-09-25 20:05:58 | 2020 | 1.11
1244 | 2022-09-24 20:29:54 | 2020 | 1.11
1243 | 2022-09-24 20:29:54 | 2020 | 1.11
1242 | 2022-09-24 20:08:08 | 2020 | 1.11
1241 | 2022-09-24 20:08:08 | 2020 | 1.11
1240 | 2022-09-22 20:10:55 | 2020 | 1.11
1239 | 2022-09-22 20:10:05 | 2020 | 1.11
922 | 2022-02-11 20:29:21 | 2020 | 1.15
921 | 2022-02-11 20:29:20 | 2020 | 1.15
press eneter back to main menu.....
```

我们根据 session 的时间去找 id，下面截图做详细例子

比如这个列表里我有一场比赛是在 9 月 25 号跑的，可以看到 9 月 25 号有三个时间

```
0. Exit
your choice: 1
```

sessionID	session time	packet format	game version
1278	2022-10-05 22:53:13	2020	1.11
1277	2022-10-05 22:51:47	2020	1.11
1276	2022-10-05 22:50:12	2020	1.11
1275	2022-10-05 22:49:20	2020	1.11
1252	2022-09-25 20:29:50	2020	1.11
1251	2022-09-25 20:29:49	2020	1.11
1250	2022-09-25 20:29:49	2020	1.11
1249	2022-09-25 20:29:49	2020	1.11
1248	2022-09-25 20:27:10	2020	1.11
1247	2022-09-25 20:27:10	2020	1.11
1246	2022-09-25 20:27:10	2020	1.11
1245	2022-09-25 20:05:58	2020	1.11
1244	2022-09-24 20:29:54	2020	1.11
1243	2022-09-24 20:29:54	2020	1.11
1242	2022-09-24 20:08:08	2020	1.11
1241	2022-09-24 20:08:08	2020	1.11
1240	2022-09-22 20:10:55	2020	1.11
1239	2022-09-22 20:10:05	2020	1.11
922	2022-02-11 20:29:21	2020	1.15
921	2022-02-11 20:29:20	2020	1.15

```
press eneter back to main menu.....
```

很明显 1245 这个 id 的开始时间是排位，但是对于正赛的 session，游戏的遥测系统将暖胎圈和起跑后的正赛区分开了，所以在这里可以判断 1246-1248 是暖胎圈，1249-1252 是正赛

但是由于网络的正常波动，会发现会有多个 sessionid 在同一个时间内重叠，比如暖胎圈和正赛都有

```
your choice: 1
```

sessionID	session time	packet format	game version
1278	2022-10-05 22:53:13	2020	1.11
1277	2022-10-05 22:51:47	2020	1.11
1276	2022-10-05 22:50:12	2020	1.11
1275	2022-10-05 22:49:20	2020	1.11
1252	2022-09-25 20:29:50	2020	1.11
1251	2022-09-25 20:29:49	2020	1.11
1250	2022-09-25 20:29:49	2020	1.11
1249	2022-09-25 20:29:49	2020	1.11
1248	2022-09-25 20:27:10	2020	1.11
1247	2022-09-25 20:27:10	2020	1.11
1246	2022-09-25 20:27:10	2020	1.11
1245	2022-09-25 20:05:58	2020	1.11
1244	2022-09-24 20:29:54	2020	1.11
1243	2022-09-24 20:29:54	2020	1.11
1242	2022-09-24 20:08:08	2020	1.11
1241	2022-09-24 20:08:08	2020	1.11
1240	2022-09-22 20:10:55	2020	1.11
1239	2022-09-22 20:10:05	2020	1.11
922	2022-02-11 20:29:21	2020	1.15
921	2022-02-11 20:29:20	2020	1.15

```
press eneter back to main menu.....
```

此时只需要最新的那个 sessionid 即可，比如暖胎圈是 1248，正赛是 1252，用这个 id 可以抓取到这个 session 的数据了

抓取结算表，使用 5，跟随系统提示输入 sessionid:

```
Welcome to AFR telemetry data center

1. recent session id
2. qualifying lapdata
3. race lapdata
4. telemetry data
5. final classification
6. delete data
7. fetch all data (by event)
0. exit

your choice: 5
please enter session id 1:
```

他会让你输入两个 id，这个是以前的赘余设计，用于应对刚才上面说的同一个 session 出现多个 id 的情况，像上面说的 sessionid 1249-1252 是正赛，

1. 在这里 id 1 输入 1249，id 2 输入 1252

或

2. id 1 输入 1252，id 2 直接按回车

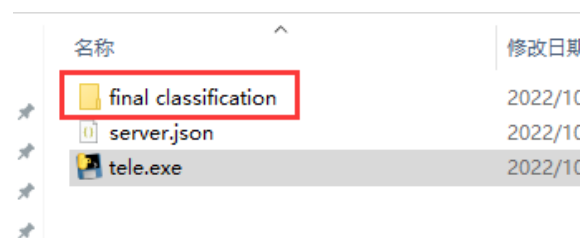
两种方法都可以抓取到正确的数据，抓取成功后会有以下提示

```
Welcome to AFR telemetry data center

1. recent session id
2. qualifying lapdata
3. race lapdata
4. telemetry data
5. final classification
6. delete data
7. fetch all data (by event)
0. exit

your choice: 5
please enter session id 1: 1252
please enter session id 2:
Final Classification data of session 1252 fetched and saved!
Race Director data of session 1252 fetched and saved!
press eneter back to main menu.....
```

然后在“tele_data”文件夹中就可以看到创建了一个新的文件夹



结算表数据是保存在了“FinalClassification_<sessionid>.xlsx”里面

	A	B	C	D	E	F	G	H	I	J	K	L
1	name	team	position	Laps	grid	pits	status	bestLapTime	totalTime	penalties	tyreStints	
2	CM401ASM	MERCEDES	1	32	4	1	FINISHED	1:18.473	42:55.947	0	HM	
3	Seb V5	WILLIAMS	2	32	11	1	FINISHED	1:18.371	42:58.755	3	HM	
4	Suburbanite	MERCEDES	3	32	1	1	FINISHED	1:17.079	43:02.057	0	HM	
5	DNFzbk	TORO_ROSSO	4	32	5	1	FINISHED	1:17.383	42:56.556	6	HM	
6	SHZ	RED_BULL_RACING	5	32	9	1	FINISHED	1:18.754	43:06.485	0	HM	
7	SHMJimmy	RED_BULL_RACING	6	32	2	1	FINISHED	1:18.247	43:01.511	5	HM	
8	tinnycatty809yhb	FERRARI	7	32	10	1	FINISHED	1:18.783	43:48.337	6	MH	
9	Livistar	MCLAREN	8	32	12	1	FINISHED	1:18.731	43:54.631	3	HM	
10	333	RENAULT	9	32	8	1	FINISHED	1:19.653	44:03.162	0	MH	
11	Headbrother	TORO_ROSSO	10	32	7	2	FINISHED	1:17.512	44:18.617	3	MHS	
12	Ayanami	ALFA_ROMEO	11	29	6	3	RETIRED	1:18.022	41:34.991	19	HMSH	
13	wofa	FERRARI	12	21	3	3	DISQUALIFIED	1:19.488	0.000	3	MSSH	
14	i4foru	ALFA_ROMEO	13	19	13	3	DISQUALIFIED	1:20.827	30:39.116	0	HSSM	
15												

然后这些数据就可以将相应的复制到成绩表中（教程 3）

而积分系统上传功能也是根据遥测数据的输出格式做过一定的优化