**گزارش سوال دوم آزمایش های کامپیوتری**

در این آزمایش ما با 2 دیتاست مواجه هستیم که باید به کمک دیتاست train به برنامه ی خود بیاموزیم که چگونه دیتاست دوم که همان دیتاست test هست را مورد تحلیل و بررسی قرار دهد.

دیتاست ها شامل امتیازی است که تعدادی از افراد به 1593 خبر داده اند و نوعی علاقه خود به آن نوع خبر را نشان داده اند و در آخر با توجه به تمام امتیاز های هر شخص به خبر ها، شخص در یکی از دو گروه مورد نظر ما قرار میگیرد.

ما با تحلیل دیتاست test میخواهیم نشان دهیم که هر شخص به کدام گروه تعلق دارد. برای این منظور باید از نتایج مشابه در دیتاست train کمک بگیریم.

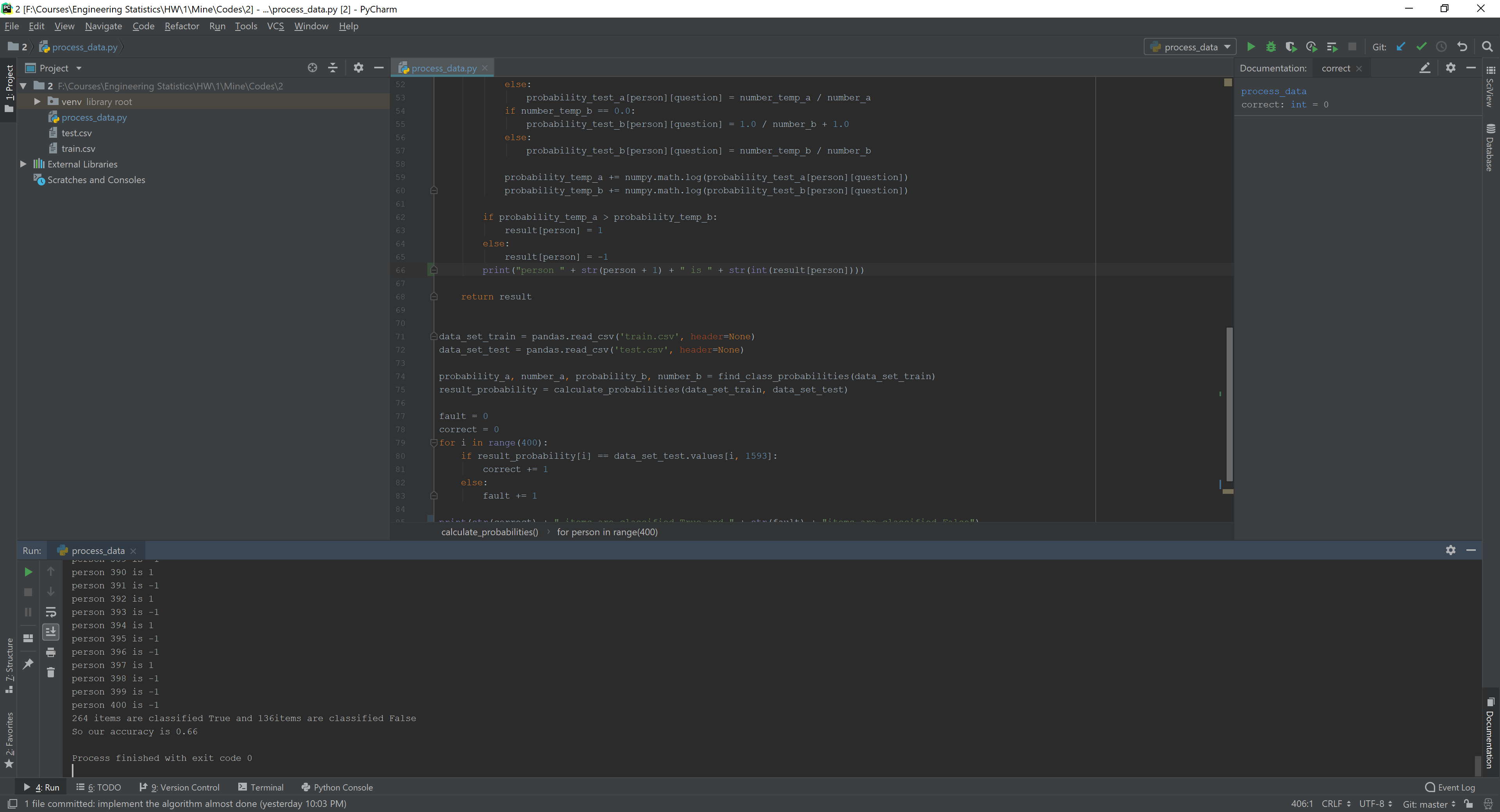
برای حل این سوال ما احتمال اینکه هر فرد با توجه به امتیاز هایی که به خبر ها داده است به کدام

گروه تعلق دارد را محاسبه میکنیم و گروهی را که احتمال آن بیشتر شد را به آن فرد نسبت میدهیم.

برای محاسبه ما باید از قانون بیز استفاده کنیم.

با توجه به کدی که من طراحی کردم و نتایجی که بدست آوردم و مقایسه نتایج با نتایج پیشبینی شده میتوان گفت که این آزمایش دارای دقت 66 درصد بوده است. به طوری که 264 خروجی با مقدار پیشبینی شده یکسان بوده و 136 خروجی اشتباه بدست آمده اند.

نتایج کامل بدست آمده از خروجی برنامه به صورت زیر است که به علت طولانی بودن زمان اجرا، آن ها را در این سند آورده ام که میتوانید در صفحات بعد آن ها را مشاهده کنید.



person 1 is 1

person 2 is 1

person 3 is -1

person 4 is -1

person 5 is -1

person 6 is 1

person 7 is -1

person 8 is 1

person 9 is -1

person 10 is 1

person 11 is 1

person 12 is -1

person 13 is 1

person 14 is -1

person 15 is -1

person 16 is 1

person 17 is -1

person 18 is 1

person 19 is 1

person 20 is -1

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person 389 is -1

person 390 is 1

person 391 is -1

person 392 is 1

person 393 is -1

person 394 is 1

person 395 is -1

person 396 is -1

person 397 is 1

person 398 is -1

person 399 is -1

person 400 is -1

**264 items are classified True and 136 items are classified False**

**So our accuracy is 0.66**