

## Question #2:

### Pay Gap Bot (30 points)

Please read [important information](#) first.

#### Description

The government of the UK expects the companies based there to report their gender pay gap two times within a year between their female and male-defined employees. We would like to find the mean quartile difference between male and female defined employees.

You are given a part of this list including the information of employer name, employer ID, address, postcode, company number, the difference of mean hourly percent, the difference of median hourly percent between, the difference of mean bonus percent, the difference of median bonus percent, male bonus percent, female bonus percent, male lower quartile, female lower quartile, male lower middle quartile, female lower middle quartile, male upper middle quartile, female upper middle quartile, male top quartile, female top quartile, company link to GPG info, responsible person, employer size, current name, submitted after the deadline, due date, date submitted.

You are expected to take the employer ID, calculate the mean quartile difference, and print it.

A visual representation of part of the example file can be seen below:

EmployerName	EmployerId	Address	PostCode	CompanyNumber	DiffMeanHourlyPercent	DiffMedianHourlyPercent	DiffMeanBonusPercent	DiffMedianBonusPercent
'PRIFYSGOL ABERYSTWYTH' AND 'ABERYSTWYTH UNIVERSITY'	19070	Aberystwyth University, Penglais, Ceredigion, SY23 3FL	SY23 3FL	RC000641	8.5	3.7		
"RED BAND" CHEMICAL COMPANY, LIMITED	16879	19 Smith's Place, Leith Walk, Edinburgh, EH6 8NU	EH6 8NU	SC016876	0.6	-4.4	14.1	
1509 GROUP	15320	Royal Grammar School, High Street, Guildford, Surrey, GU1 3BB	GU1 3BB	4104101	18	16		

#### Inputs

You are given a file filled with the information mentioned in the description. You are expected to take the file name and employee ID from the user, and then open it. The user input parts are already implemented in the code.

#### Outputs

You are expected to print the calculated mean quartile difference for the company. The result might be in float type, you should only print the 2 digits after the decimal point. If the employee ID is not available in the list, you should print "No employee found".

You should be doing this calculation:

mean quartile difference =  $[\sum(\text{male quartiles}) - \sum(\text{female quartiles})] / 4$

#### Constraints

1 < Employee ID < 22000

Separator: "\t"

There will be no empty values or invalid data.

You are expected to use two loops in this question.

#### Hint

The split() method splits a string into a list. You can specify the separator, the default separator is any whitespace.

#### Examples

Input	Output
paygapdata.txt 19070	-5.70
paygapdata.txt 695	2
paygapdata.txt 76	No employee found
paygapdata.txt 14399	82.5