

User Manual for P1

Introduction:

This program will take your Social Security Number and income; then output your federal income tax according to this tax schedule.

If the amount on Form 1040, line 38 is ...	But not over	Enter on Form Form 1040, line 39	plus	of the amount over ...
\$ 0	\$ 24,650	0.00	+ 15%	0
24,650	59,750	3,697.50	+ 28%	24,650
59,750	124,650	13,525.50	+ 31%	59,750
124,650	271,050	33,644.50	+ 36%	124,650
271,050		86,348.50	+ 39.6%	271,050

1. Executing the Program:

To run this program, go into the folder(where ever you git cloned this) and double click the .exe, and this will open a window. Next, Input your Social Security Number press enter; then input your income and press enter. Finally, to exit after running, simply input 'n' or 'no' when prompted to continue. You must input 'y' or 'yes' if you want to continue.

2. Input:

Your Social Security Number, Income, and if you want to continue are the things you have to enter into the program.

2.1 Input Requirements:

Your Social Security Number should only have nine digits, and those digits must be 0-9. Your income must have with two decimals at the end. Enter 'yes' or 'y' if you want to continue. Enter 'n' or 'no' if you don't want to continue. You must enter first your Social Security Number then your Income, and after then result you enter if you want to run the program again.

git

2.2 Input Restrictions:

Your income shouldn't be greater than 2147483647 or less than -21474836467 if it is there will be an error crashing the program. The income should be an integer if you add characters at the end of the integer or in the middle only the initial integer input will be taken(including digit separator ','). As forenamed, your Social Security Number should be 9 digits long using only digits 0-9, but it should be all zeroes. Your answer to if should want to continue should be either *yes*, *y*, *no*, *n*.

3 Output:

Your output after your input everything(except for the prompt to continue or not) will be text and in the format "Hello [Social Security Number] here is your federal income tax [tax]." The answer to the prompt to continue running or not will vary depending on your answer. If you input 'yes' or 'y', the program will run again; if you input 'n' or 'no', the program will simply stop running.

3.1 Successful Output Example:

```
Please input Social Security Number: 987652896
Please enter income:
90000
Hello 987652896 here is your federal income tax 22902.00.
Please input if you want to still continue y/n
N
```

3.2 Output Failure

If you input an invalid Social Security Number, the program will return this error

```
Please input Social Security Number: 909090
Invalid input please input an integer Social Security Number 9 characters long, in the form
xxxxxxxxx, and at least one non-zero character.
```

If you instead input an invalid income, the program will return this error; this error will also be returned if you are out of range for an integer (range is ± 2147483647).

```
Please enter income:
i2e
Invalid input please enter integer income
```

When choosing if you want to continue or not, an invalid choice will give you this error.

```
wew
Invalid input please input either y or n
```

A useful tip to note is after all errors the program will simply prompt for the input again.