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Practical No. 3: Practical based on accepting income from the user and finding the income tax to be paid by the user.

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Python Program to Calculate Income Tax :

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Description:

In this program, we will take annual income from the user as input after that we will pass that data to compare the Tax slab with different if-else conditions. After comparing we will calculate the tax and return it to that function to print the calculated Tax on that Income.

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Tax slabs for AY 2022-23 :

AMOUNT

Up to ₹2,50,000

₹2,50,001 – ₹5,00,000

₹5,00,001 – ₹7,50,000

₹7,50,001 – ₹10,00,000

₹10,00,001 – ₹12,50,000

₹12,50,001 – ₹15,00,000

Above ₹15,00,001

INCOME TAX RATE

0%

5% above ₹2,50,000

10% above ₹5,00,000 + ₹12,500

15% above ₹7,50,000 + ₹37,500

20% above ₹10,00,000 + ₹75,000

25% above ₹12,50,000 + ₹1,25,000

30% above ₹15,00,000 + ₹1,87,500

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Python Code:

```
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elif total_income <= 1000000:
    return calculate(total_income -
                      750000, 15) + 37500
elif total_income <= 1250000:
    return calculate(total_income -
                      1000000, 20) + 75000
elif total_income <= 1500000:
    return calculate(total_income -
                      1250000, 25) + 125000
else:
    return calculate(total_income -
                      1500000, 30) + 187500
```

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Python Code:

```
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+ ✂ 📄 📋 ▶ ■ ⌂ ⏪ Code ▼ Python C
if __name__ == '__main__':
    total_income = float(input("What's your annual income?\n>>> "))

    tax = calculate_income_tax(total_income)
    print(f"Total tax applicable at ₹{total_income} is ₹{tax}")
```

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Output Window:

What's your annual income?

>>> ↑↓ for history. Search history with c-↑/c-↓

[]:

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Output:

What's your annual income?

```
>>> 1392000
```

```
Total tax applicable at \ ₹1392000.0 is ₹160500.0
```

```
[ ]:
```


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Output Window with code:

```
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Python
[1]: def calculate(amount, percent):
    return (amount * percent) / 100

def calculate_income_tax(total_income:
    Float) -> Float:

    if total_income <= 250000:
        return 0
    elif total_income <= 500000:
        return calculate(total_income -
            250000, 5)
    elif total_income <= 750000:
        return calculate(total_income -
            500000, 10) + 12500
    elif total_income <= 1000000:
        return calculate(total_income -
            750000, 15) + 37500
    elif total_income <= 1250000:
        return calculate(total_income -
            1000000, 20) + 75000
    elif total_income <= 1500000:
        return calculate(total_income -
            1250000, 25) + 125000
    else:
        return calculate(total_income -
            1500000, 30) + 187500

if __name__ == '__main__':
    total_income = float(input("What's your annual income?\n>>> "))
    tax = calculate_income_tax(total_income)
    print(f"Total tax applicable at \ ₹{total_income} is ₹{tax}")

What's your annual income?
>>> 1392000
Total tax applicable at \ ₹1392000.0 is ₹160500.0
```

Python Program to Calculate Income Tax :

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Another Illustration:

```
File Edit View Run Kernel Settings Help
Python

[3]: def calculate(amount, percent):
    return (amount * percent) / 100

    def calculate_income_tax(total_income:
        float) -> float:

        if total_income <= 250000:
            return 0
        elif total_income <= 500000:
            return calculate(total_income -
                250000, 5)
        elif total_income <= 750000:
            return calculate(total_income -
                500000, 10) + 12500
        elif total_income <= 1000000:
            return calculate(total_income -
                750000, 15) + 37500
        elif total_income <= 1250000:
            return calculate(total_income -
                1000000, 20) + 75000
        elif total_income <= 1500000:
            return calculate(total_income -
                1250000, 25) + 125000
        else:
            return calculate(total_income -
                1500000, 30) + 187500

    if __name__ == '__main__':
        total_income = float(input("What's your annual income?(rupees)"))
        tax = calculate_income_tax(total_income)
        print(f"Total tax applicable at \ {total_income} is ₹{tax}")

    What's your annual income?
    >>> 300000
    Total tax applicable at \ 300000.0 is ₹2500.0
```

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Output Window of Another Illustration:

What's your annual income?

```
>>> 300000
```

```
Total tax applicable at \ ₹300000.0 is ₹2500.0
```

```
[ ]:
```