Artificial Intelligence

Lab 03

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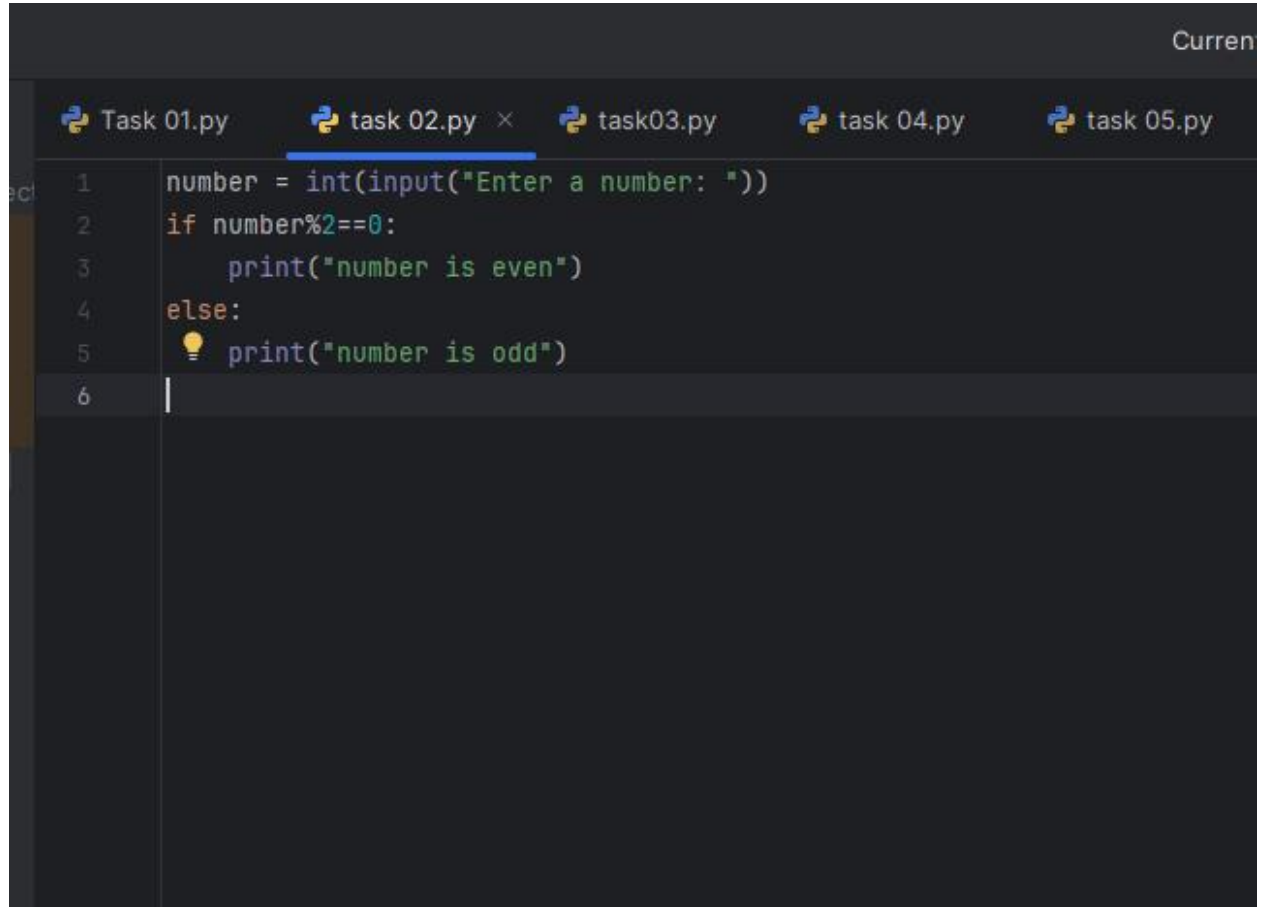
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Task 01

```python
number = int(input("Enter a number: "))
if -10 < number < 10:
    print("The number is a single-digit number.")
elif -100 < number < 100:
    print("The number is a double-digit number.")
elif -1000 < number < 1000:
    print("The number is a triple-digit number.")
else:
    print("The number has more than three digits.")
```
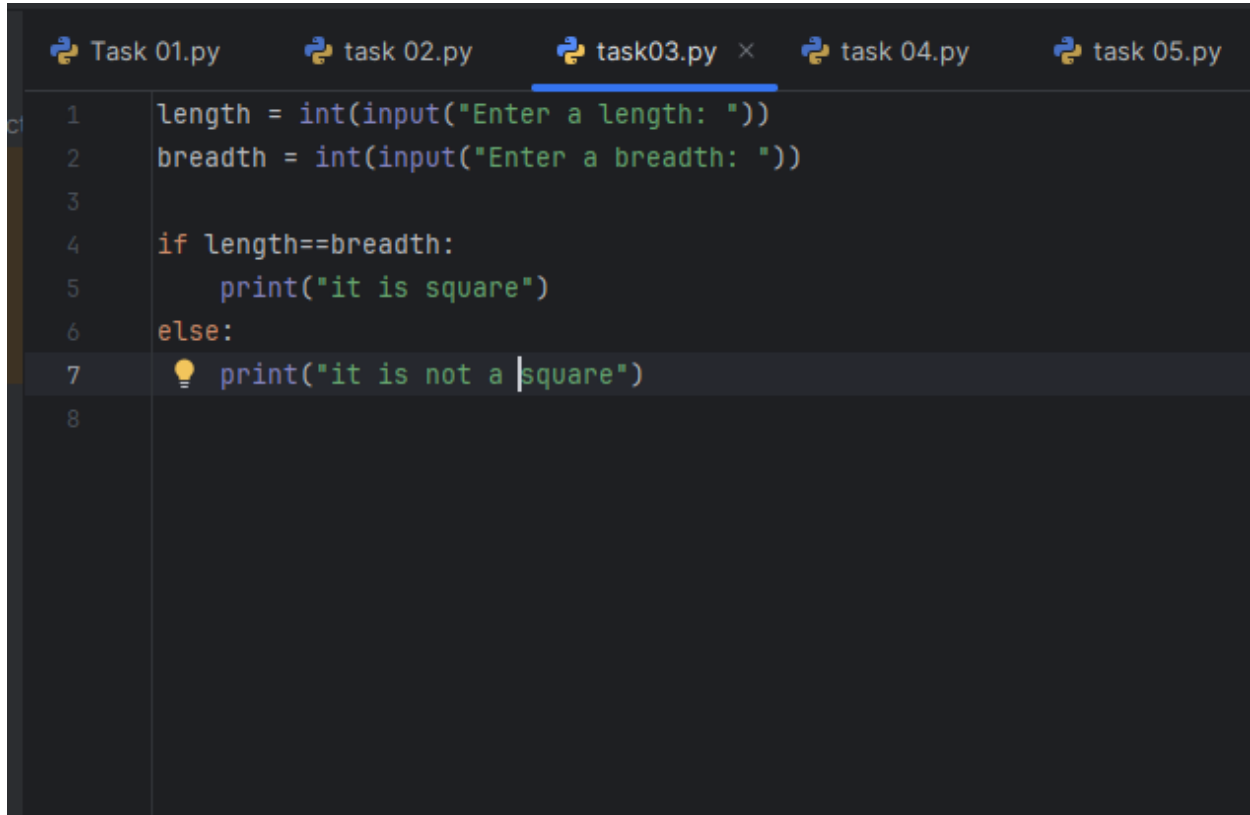
Task 02

```python
number = int(input("Enter a number: "))
if number%2==0:
    print("number is even")
else:
    print("number is odd")
```

Task 03

```
Task 01.py        task 02.py        task03.py  ×        task 04.py        task 05.py
1    length = int(input("Enter a length: "))
2    breadth = int(input("Enter a breadth: "))
3
4    if length==breadth:
5        print("it is square")
6    else:
7        print("it is not a square")
8
```
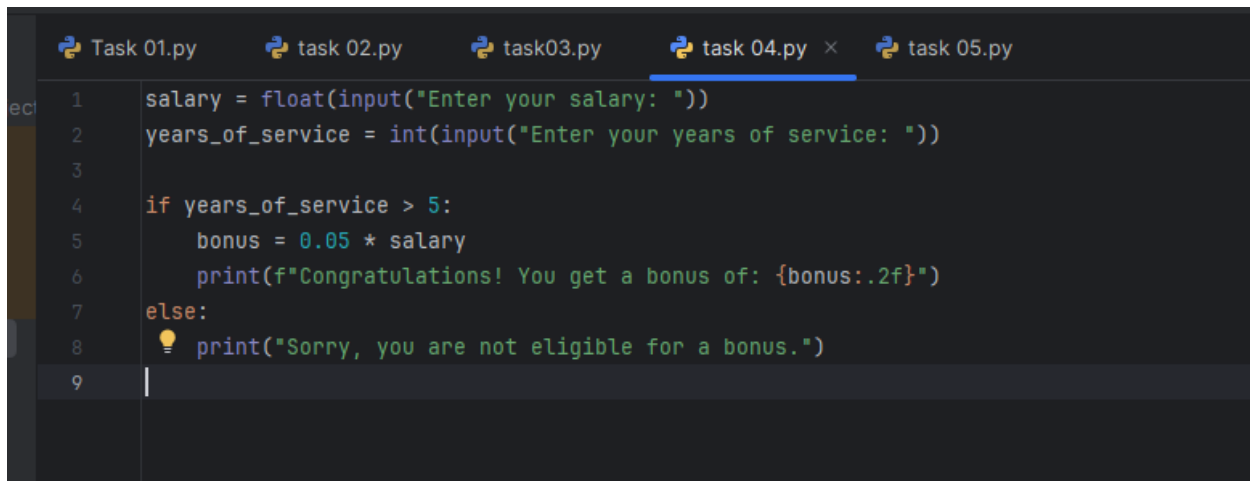
Task 04

```
Task 01.py        task 02.py        task03.py        task 04.py  ×        task 05.py
1    salary = float(input("Enter your salary: "))
2    years_of_service = int(input("Enter your years of service: "))
3
4    if years_of_service > 5:
5        bonus = 0.05 * salary
6        print(f"Congratulations! You get a bonus of: {bonus:.2f}")
7    else:
8        print("Sorry, you are not eligible for a bonus.")
9
```

Task 05

```python
year = int(input("Enter a year: "))

if (year % 4 == 0 and year % 100 != 0) or (year % 400 == 0):
    print("Leap Year")
else:
    print("Not a leap year.")
```