



Artificial Intelligence

Lab 03 Tasks

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Task1.**Solution:**

```
1 num = int(input('Enter any number: '))
2
3 if num < 0:
4     print(f'{num} is a negative number.')
5 elif num < 10:
6     print(f'{num} is one digit number.')
7 elif num < 100:
8     print(f'{num} is two digit number.')
9 elif num < 1000:
10    print(f'{num} is three digit number.')
11 else:
12    print(f'{num} is more than three digit number.')

Enter any number: 765
765 is three digit number.
```

Task2.**Solution:**

```
1 num = int(input('Enter any number: '))
2
3 if num % 2 == 0:
4     print(f'{num} is an even number.')
5 else:
6     print(f'{num} is an odd number.')

Enter any number: 10
10 is an even number.
```

Task3.**Solution:**

```
1 length = int(input('Enter length: '))
2 width = int(input('Enter width: '))
3
4 if length == width:
5     print(f'{length} and {width} are sides of a square.')
6 else:
7     print(f'{length} and {width} are sides of a rectangle.')
```

```
Enter length: 8
Enter width: 6
8 and 6 are sides of a rectangle.
```

Task4.**Solution:**

```
salary = int(input('Enter your salary: '))
years = int(input('Enter service years: '))

if years > 5:
    bonus = salary * 0.05
    print(f'your net bonus amount is {bonus}')
else:
    print('As your service years are not more than 5. So, you dont get any bonus')
```

```
Enter your salary: 70000
Enter service years: 6
your net bonus amount is 3500.0
```

Task5.**Solution:**

```
1 year = int(input('Enter year: '))
2
3 if (year %4 == 0 and year %100 != 0) or (year %400 == 0):
4     print(f'{year} is a leap year.')
5 else:
6     print(f'{year} is not a leap year.')
```

```
Enter year: 2026
2026 is not a leap year.
```
