def show_output(number):
    if number >= 30 and number < 60:
        print("A")
        number = number - 10
    else:
        print("B")
        number = number + 10
    if number % 9 == 0:
        print("C")
        number = number - 10
    else:
        print("D")
        number = number + 10
    print(number)

def main():
    show_output(30)
main()
Complete the function

- Complete the add_bonus() function which prints "Good job!" and returns 30000 plus the salary if the parameter is a value greater than 150000. Otherwise it prints "Excellent performance!" and returns 300 plus the salary.

```python
def add_bonus(salary):

def main():
    salary = 34000
    new_salary = add_bonus(salary)
    print("old salary: $" + str(salary))
    print("new salary: $" + str(new_salary))
    print()
    salary = 250000
    new_salary = add_bonus(salary)
    print("old salary: $" + str(salary))
    print("new salary: $" + str(new_salary))
main()
```

- Excellent performance!
  old salary: $34000
  new salary: $34300

- Good job!
  old salary: $250000
  new salary: $280000
def show_output(x, y, z):
    if x == 5 or y > 5:
        if x > 4 and z == 8:
            print("A ")
        else:
            if y == 6 and z >= x:
                print("B ")
            else:
                print("C ")
    else:
        print("D ")

def main():
    show_output(4, 6, 8)

main()
Complete the function

- Complete the compare_nums1() function which is passed two integers and returns a string. The function compares the first number to the second number and returns one of the following three strings (i.e., the string which is applicable):

  "equal to"   OR   "less than"   OR   "greater than"

```python
def compare_nums1( num1, num2):

def main():
    num1 = random.randrange(1, 100)
    num2 = random.randrange(1, 100)
    comparison = compare_nums1(num1, num2)
    print(num1, "is", comparison, num2)
main()
```

Use a nested if to write the code

- 85 is greater than 21
- 64 is equal to 64
- 16 is less than 86
Complete the function

- Complete the compare_nums2() function which is passed two integers and returns a string. The function compares the first number to the second number and returns one of the following three strings (i.e., the string which is applicable):

  "equal to" OR "less than" OR "greater than"

```python
def compare_nums2( ):
    def main():
        num1 = random.randrange(1, 100)
        num2 = random.randrange(1, 100)
        comparison = compare_nums2(num1, num2)
        print(num1, "is", comparison, num2)
    main()
```

Use an if...elif to write the code

- 16 is less than 86
- 64 is equal to 64
- 85 is greater than 21
A year is a leap year if it is divisible by 400, or 'divisible by 4 but not divisible by 100', e.g., 1900, 2011 and 2100 are not a leap years whereas 2000, 2008 and 2400 are leap years. Complete the is_leap_year() function:

```python
def is_leap_year(year):

def main():
    print(is_leap_year(1900))
    print(is_leap_year(2011))
    print(is_leap_year(2100))
    print(is_leap_year(2000))
    print(is_leap_year(2008))
    print(is_leap_year(2400))
main()
```

Output:

```
False
False
False
True
True
True
```