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In [ ]: import re
def phone_number(phone):
    pattern = '^[0-9]{10}$'
    if re.match(pattern, phone):
        return True
    return False
print(phone_number("1234567891"))
def name(name):
    pattern = '^[A-Z][a-z]+$'
    if re.match(pattern, name):
        return True
    return False
print(name("Siddharth"))
def email(email):
    pattern = '^[a-z0-9]+@[a-z]+\.[a-z]+$'
    if re.match(pattern, email):
        return True
    return False
print(email("siddharth@gmail.com"))
def date(date):
    pattern = '^[0-9]{2}-[0-9]{2}-[0-9]{4}$'
    if re.match(pattern, date):
        return True
    return False
print(date("09-12-2024"))
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In [ ]: class RestaurantCheck:
    def __init__(self, check_number, sales_tax_percent, subtotal, table_number, server_name):
        self.check_number = check_number
        self.sales_tax_percent = sales_tax_percent
        self.subtotal = subtotal
        self.table_number = table_number
        self.server_name = server_name

    def calculate_total(self):
        return self.subtotal * (1+self.sales_tax_percent/100)

    def print_check(self):
        output_file = open('check' + str(self.check_number) + '.txt', 'w')
        print('Check Number:', self.check_number, file=output_file)
        print('Sales tax: ', self.sales_tax_percent, '%', sep='', file=output_file)
        print('Subtotal: {:.2f}'.format(self.subtotal), file=output_file)
        print('Total: {:.2f}'.format(self.calculate_total()), file=output_file)
        print('Table Number:', self.table_number, file=output_file)
        print('Server:', self.server_name, file=output_file)
        output_file.close()

check = RestaurantCheck(443, 6, 23.14, 'Sonic the Hedgehog', 17)
check.print_check()
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In [ ]:
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In [ ]:
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