

### Answer 1

```
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 = '$' + str(round(subtotal, 2))
        self.table_number = table_number
        self.server_name = server_name

    def calculate_total(self):
        sub = float(self.subtotal.strip('$'))
        total = sub * (1 + self.sales_tax_percent / 100)
        return '$' + str(round(total, 2))

    def print_check(self):
        opfile = open('check' + str(self.check_number) + '.txt', 'w')
        print('Check Number:', self.check_number, file=opfile)
        print('Sales Tax: ', self.sales_tax_percent, '%', sep = '',
file = opfile)
        print('Subtotal: ', self.subtotal, file = opfile)
        print('Total: ', self.calculate_total(), file = opfile)
        print('Table Number:', self.table_number, file = opfile)
        print('Server:', self.server_name, file = opfile)
        opfile.close()

check = RestaurantCheck(1020, 18, 4389.2333, 19, 'John Doe')
check.print_check()
```

### Answer 2

```
import re

def phoneNumber(number):
    valid = '^([0-9]{10})$'
    if re.match(valid, number):
        return True
    return False

print(phoneNumber("9876987698"))

def name(name):
    valid = '^[A-Z][a-z]+$'
    if re.match(valid, name):
        return True
    return False

print(name("Baskar"))
```

```
def email(email):
    valid = '^[a-z0-9]+@[a-z]+\.[a-z]+$'
    if re.match(valid, email):
        return True
    return False

print(email("baskar@gmail.com"))

def date(date):
    valid = '^[0-9]{2}-[0-9]{2}-[0-9]{4}$'
    if re.match(valid, date):
        return True
    return False

print(date("12-06-2023"))

True
True
True
True
```