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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):
        global Total
        Total=self.subtotal
        Total+=round(Total*(self.sales_tax_percent)/100,2)

    def print_check(self):
        self.calculate_total()

        myfile="check"+str(self.check_number)
        file=open(myfile+'.txt','w')

        file.write("Check_Number: "+str(self.check_number)+'\n')
        file.write("Sales_tax: "+str(self.sales_tax_percent)+'%\n')
        file.write("Subtotal: $"+str(self.subtotal)+'\n')
        file.write("Total: $"+str(Total)+'\n')
        file.write("Table_number: "+ str(self.table_number)+'\n')
        file.write("Server: "+str(self.server_name)+'\n')

        file.close()

res=RestaurantCheck(443,6.0,23.14,17,"Sonic the Hedgehog")

res.print_check()

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In [ ]: import re
#phone number should be 10 digits
phone=input("Enter phone number: ")
pn=re.search("^\d{10}$",phone)
if pn:
    print("valid phone number")
else:
    print("Not a valid phone number")

#Name starts with Capital letter or not
name=input("Enter a Name: ")
nm=re.search("^[A-Z]",name)
if nm:
    print("First charecter is capital")
else:
    print("First charecter not a capital")

#Email validation
email=input("enter email: ")
em=re.search("^[a-zA-Z0-9]+@[a-zA-Z0-9]+\.[a-zA-Z]{2,}$",email)
if em:
    print("Valid Email...")
else:
    print("Not a valid email..")

#date validation
date=input("Enter a date: ")
dt=re.search("^[0-9]{4}[0-9]{2}[0-9]{2}[-][0-9]{1,2}[-][0-9]{1,2}[0-9]{4}$", date)

if dt:
    print("Valid date...")
else:
    print("invalid date...")

```

In []: