class hasht:

arry = []

for i in range(10):

a = [-1, -1]

arry.append(a)

def insert(self, no):

index = no % 10

if self.arry[index][0] == -1:

self.arry[index][0] = no

else:

t = index + 10

while(self.arry[index % 10][1] != -1 and t > index):

index = self.arry[index % 10][1]

tmpi = index

if index == t:

print("Hash table is full")

return

else:

t = index + 10

while(self.arry[index % 10][0] != -1 and t > index):

index = index + 1

if index == t:

print("Hash table is full")

return

self.arry[index % 10][0] = no

self.arry[tmpi % 10][1] = index%10

def printht(self):

for i in range(10):

print(i, " ", self.arry[i][0], " ", self.arry[i][1])

def find(self,no):

index = no%10

if self.arry[index][0] == no:

print("No found ")

else:

t = 0

while(self.arry[index%10][0] != no and t <10):

index = self.arry[index%10][1]

t = t+1

if self.arry[index][0] == no:

print("No found ")

else:

print("No is not present in hash table ")

def delteno(self,no):

index = no%10

if self.arry[index][0] == no:

print("No found ")

self.arry[index][0] = -1

print("no deleted")

else:

t = 0

lindex = index

while(self.arry[index%10][0] != no and t<10):

lindex = index

index = self.arry[index%10][1]

t = t+1

if self.arry[index][0] == no:

print("No found ")

self.arry[lindex%10][1] = self.arry[index%10][1]

self.arry[index%10][0] = -1

print("no deleted")

else:

print("No is not present in hash table ")

p1 = hasht()

c = -1

while c != 5:

print("Enter 1 to add the no \nEnter 2 to display hashing table \nEnter 3 to find \nEnter 4 to delet\nEnter 5 to exit")

c = int(input())

if c == 1:

print("Enter the no you want to insert : ")

num = int(input())

p1.insert(num)

if c == 2:

p1.printht()

if c == 3:

print("Enter the no you want to Find : ")

num = int(input())

p1.find(num)

if c == 4:

print("Enter the no you want to Delete : ")

num = int(input())

p1.delteno(num)