**Compiler Design Lab Report(CSE-306L)**

**AP20110010575 - NOTI MOUNICA**

**Implementation of symbol table**

We implemented the symbol table in python by using dictionary,lists.

**Data types used**:

**1**.**Integer**

This will take **4** bytes

Keyword used is **int**

**2.Float**

This will take **8** bytes

Keyword used is **float**

**3.Character**

This will take **1** byte

Keyword used is **char**

**4.Arrays**

Total number of bytes=size of the array\*(size of datatype)

Keyword used is **arrays**

**5.Structures**

This will take **1** byte

Keyword used is **structure**

**Code:**

dict={}

print("Available datatypes are")

print("1.int 2. float 3. char 4. arrays 5. structure")

while(1):

    t=int(input("if you want to end enter 0:"))

    if(t==0):

        break

    datatype=input("enter the datatype:")

    if(datatype=="int"):

       value=input("enter the name of identefier:")

       dict[datatype]=value

    elif(datatype=="char"):

       value=input("enter the name of identefier:")

       dict[datatype]=value

    elif(datatype=="float"):

       value=input("enter the name of identefier:")

       dict[datatype]=value

    elif(datatype=="arrays"):

       l=[]

       value1=input("enter the size of the array:")

       value2=input("enter the type of the array:")

       l.append(value1)

       l.append(value2)

       dict[datatype]=l

    elif(datatype=="structure"):

       l=[]

       value1=int(input("enter the total number of datatypes:"))

       for i in range(value1):

           d={}

           t=input("enter the datatype:")

           m=input("enter the name of identifier:")

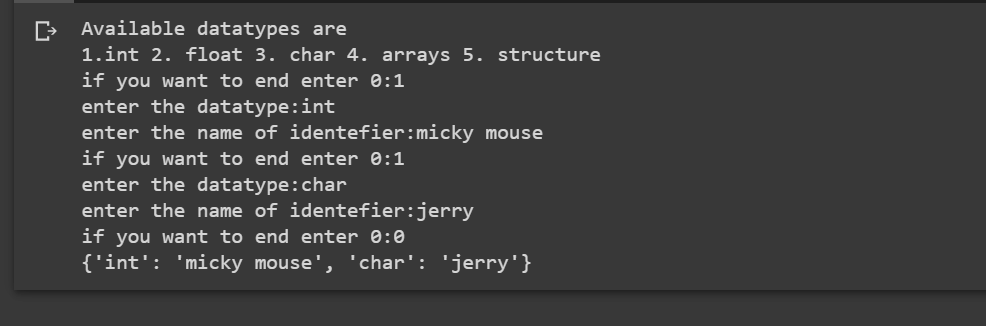
           d[t]=m

           l.append(d)

       dict[datatype]=l

print(dict)

**Output:**

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