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from tkinter import *
team=Tk()
width=team.winfo_screenwidth()
height=team.winfo_screenheight()
def open_team():
 new=Toplevel(team)
 new.geometry("1000x1000")
 new.title("Dash Board")
 photo1=PhotoImage(file="C:\\Users\\SRITHA KOMURAVELLI\\Pictures\\1234.PNG")
 lbl1=Label(new,image=photo1,width=new.winfo_screenwidth(),height=new.winfo_screenheight())
 lbl1.pack()
 btn=Button(new,text='Enter
Records',fg='lemonchiffon2',font=("oswald",16),bg='purple3',command=entry_boxes)
 btn.place(x=450,y=400)
 def close2():
   new.destroy()
 btn1=Button(new,text='BACK',bg="green",font=("oswald",16),command=close2)
 btn1.place(x=475,y=450)
 new.mainloop()
def entry_boxes():
  root=Tk()
  root.geometry("1000x1000")
  def ok():
    first_col=[entries[i].get() for i in range(0,4,1)]
    print(first_col)
    second_col=[entries[i].get() for i in range(4,8,1)]
    print(second_col)
    third_col=[entries[i].get() for i in range(8,12,1)]
    print(third_col)
    fourth_col=[entries[i].get() for i in range(12,16,1)]
    print(fourth_col)
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fifth_col=[entries[i].get() for i in range(16,20,1)]
print(fifth_col)
sixth_col=[entries[i].get() for i in range(20,24,1)]
print(sixth_col)
team_a_name1=".join(first_col)
print(team_a_name1)
team_a_nam1=team_a_name1[0:5].strip()
team_a_scor1=int(team_a_name1[5:7])
print(team_a_scor1)
team_b_nam1=team_a_name1[7:12].strip()
team_b_scor1=int(team_a_name1[12:14])
print(team_b_scor1)
team_a_name2=".join(second_col)
team_a_nam2=team_a_name2[0:5].strip()
team_a_scor2=int(team_a_name2[5:7])
team_b_nam2=team_a_name2[7:12].strip()
team_b_scor2=int(team_a_name2[12:14])
team_a_name3=".join(third_col)
team_a_nam3=team_a_name3[0:5].strip()
team_a_scor3=int(team_a_name3[5:7])
team_b_nam3=team_a_name3[7:12].strip()
team_b_scor3=int(team_a_name3[12:14])
team_a_name4=".join(fourth_col)
team_a_nam4=team_a_name4[0:5].strip()
team_a_scor4=int(team_a_name4[5:7])
team_b_nam4=team_a_name4[7:12].strip()
team_b_scor4=int(team_a_name4[12:14])
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team_a_name5=".join(fifth_col)
team_a_nam5=team_a_name5[0:5].strip()
team_a_scor5=int(team_a_name5[5:7])
team_b_nam5=team_a_name5[7:12].strip()
team_b_scor5=int(team_a_name5[12:14])
team_a_name6=".join(sixth_col)
team_a_nam6=team_a_name6[0:5].strip()
team_a_scor6=int(team_a_name6[5:7])
team_b_nam6=team_a_name6[7:12].strip()
team_b_scor6=int(team_a_name6[12:14])
global records
records = {}
if team_a_scor1>team_b_scor1:
     records.setdefault(team_a_nam1,[]).append(team_b_nam1)
elif team_b_scor1>team_a_scor1:
     records.setdefault(team_b_nam1,[]).append(team_a_nam1)
if team_a_scor2>team_b_scor2:
     records.setdefault(team_a_nam2,[]).append(team_b_nam2)
elif team_b_scor2>team_a_scor2:
     records.setdefault(team_b_nam2,[]).append(team_a_nam2)
if team_a_scor3>team_b_scor3:
     records.setdefault(team_a_nam3,[]).append(team_b_nam3)
elif team_b_scor3> team_a_scor3:
     records.setdefault(team_b_nam3,[]).append(team_a_nam3)
if team_a_scor4>team_b_scor4:
      records.setdefault(team_a_nam4,[]).append(team_b_nam4)
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elif team_b_scor4>team_a_scor4:
        records.setdefault(team_b_nam4,[]).append(team_a_nam4)
  if team_a_scor5>team_b_scor5:
        records.setdefault(team_a_nam5,[]).append(team_b_nam5)
  elif team_b_scor5>team_a_scor5:
        records.setdefault(team_b_nam5,[]).append(team_a_nam5)
  if team_a_scor6>team_b_scor6:
        records.setdefault(team_a_nam6,[]).append(team_b_nam6)
  elif team_b_scor6>team_a_scor6:
        records.setdefault(team_b_nam6,[]).append(team_a_nam6)
  print(records)
  process_queries()
def has_direct_victory(team_a, team_b, records):
  return team_b in records.get(team_a, [])
def has_indirect_victory(team_a, team_b, records):
  visited = set()
  s = [team_a]
  while s:
    current_team=s.pop()
    if current_team==team_b:
      return True
    visited.add(current_team)
    for i in records.get(current_team,[]):
      if i not in visited:
        s.append(i)
  return False
def process_queries():
  global entries1
```

```
for i in range(1):
      for j in range(2):
        e=Entry(root)
        e.grid(row=13,column=j)
        entries1.append(e)
    def query():
      global records,team_a,team_b,num_queries
      output_text.delete("1.0", "end")
      if has_indirect_victory(team_a,team_b,records) and
has_indirect_victory(team_b,team_a,records):
        output_text.insert("end", f"{team_a} AND {team_b} HAVE DEFEATED EACH OTHER
INDIRECTLY\n")
      elif has_direct_victory(team_a, team_b, records):
        output text.insert("end", f"{team a} DEFEATED {team b} DIRECTLY\n")
      elif has direct victory(team b, team a, records):
        output text.insert("end", f"{team b} DEFEATED {team a} DIRECTLY\n")
      elif has indirect victory(team a, team b, records):
        output text.insert("end", f"{team a} DEFEATED {team b} INDIRECTLY\n")
      elif has indirect victory(team b, team a, records):
        output text.insert("end", f"{team b} DEFEATED {team a} INDIRECTLY\n")
      elif (team_a not in records) or (team_b not in records):
        output_text.insert("end", f"EITHER {team_a} OR {team_b} ARE NOT IN ENTERED RECORDS.
PLEASE CHECK!\n")
      else:
        output_text.insert("end", f"{team_a} AND {team_b} ARE NOT COMPARABLE\n")
    output_text = Text(root, height=2, width=120)
    output text.grid(row=13,column=12)
    def names():
      global entries1,team_a,team_b
      team_a1=[entries1[i].get() for i in range(0,2,2)]
      team_b1=[entries1[i].get() for i in range(1,2)]
```

entries1=[]

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print("teama ",team_a1)
      print("teamb ",team_b1)
      team_a=".join(team_a1)
      team_b=".join(team_b1)
      print(team_a)
      print(team_b)
      query()
b=Button(root,text="NEXT",bg="purple3",relief="raised",font=("oswald",10),fg="white",command=n
ames)
    b.grid(row=13,column=2)
  button = Button(root, text="OK",font=("oswald",10),command=ok)
  button.grid(row=7,column=3,columnspan=4)
  def Close():
    root.destroy()
  Btn=Button(root,text="BACK",bg="green",font=("oswald",10),command=Close)
  Btn.grid(row=11,column=3)
  l1=Label(root,text="first team names",font=("oswald",14))
  l1.grid(row=0,column=0)
  12=Label(root,text="first team score",font=("oswald",14))
  l2.grid(row=0,column=1)
  I3=Label(root,text="second team names",font=("oswald",14))
  13.grid(row=0,column=2)
  I4=Label(root,text="second team score",font=("oswald",14))
  14.grid(row=0,column=3)
  I5=Label(root,text="Enter Queries",font=("oswald",14))
  I5.grid(row=10,column=0)
  entries=[]
  for i in range(6):
    for j in range(4):
      entry=Entry(root)
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entry.grid(row=i+1, column=j)
      entries.append(entry)
  def Close():
    root.destroy()
  root.mainloop()
def help_win():
  picture=Toplevel(team)
  picture.geometry("%dx%d" % (width, height))
  picture.title("INSTRUCTIONS")
  photo1=PhotoImage(file="C:\\Users\\SRITHA KOMURAVELLI\\Pictures\\instructions1.PNG")
lbl1=Label(picture,image=photo1,width=picture.winfo_screenwidth(),height=picture.winfo_screenhe
ight())
  lbl1.pack()
  def close1():
    picture.destroy()
  bck=Button(picture,text="BACK",font=("oswald",16),fg="black",bg="green",command=close1)
  bck.place(x=1200,y=650)
  picture.mainloop()
def close():
  team.destroy()
photo=PhotoImage(file="C:\\Users\\SRITHA KOMURAVELLI\\Pictures\\teamdetails.PNG")
lbl=Label(team,image=photo,width=team.winfo_screenwidth(),height=team.winfo_screenheight())
lbl.pack()
team.title("TEAM TOURNAMENT")
team.geometry("%dx%d" % (width, height))
label=Label(team,text="TEAM TOURNAMENT",font=('Helvetica 40 bold'),fg='black',bg='steel blue')
label.place(x=450,y=200)
btn1=Button(team,text="HELP",command=help_win,font=("oswald",28),fg="black",bg="green")
btn1.place(x=250,y=450)
btn2=Button(team,text="ENTER",font=("oswald",28),fg="black",bg="green",command=open_team)
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btn2.place(x=700,y=450) \\ btn3=Button(team,text="EXIT",font=("oswald",28),fg="black",bg="green",command=close) \\ btn3.place(x=1160,y=450) \\ team.mainloop()
```