## p229278-M.SHAFEEN

## May 28, 2024

```
[]: percept=["smoke", "normal", 30]
     state=["alarm","normal","Alarm"]
     rules=["sprinkler","normal","call"]
     def getState(percept_value,value):
         index = -1
         for x in percept:
             # print(x)
             index = index+1
             if x == percept_value:
                     return state[index]
             if value==True:
                 continue
             elif int(percept_value) > percept[2]:
                     return state[2]
             # elif percept_value:
                  return state[int[index]]
     def getRules(state_value):
         index = -1
         for i in state:
             index = index+1
             if i == state value:
                 # if i.lower() == percept[0] and state_value == percept[0]:
                       return rules[0]
                 # elif i == percept[1] and int(state_value) > percept[1]:
                      return rules[1]
                 # elif i.lower() == percept[2] and state_value == percept[2]:
                       return rules[2]
                 return rules[index]
     def simpleReflexAgent(percep,value):
         return getRules(getState(percep,value))
     while (1):
         print("Choose from the following : ")
         \# visual_input = input("What situation is it ? 1 ) Smoke , 2 ) High_\(\delta\)
      → Temperaure 3 ) Normal")
```

```
choice=input("What situation is it ? 1 ) Smoke , 2 ) High Temperaure 3 ) _{\mbox{\scriptsize L}}
→Normal")
  if choice=="1":
      print(simpleReflexAgent(percept[0],True))
  elif choice=="2":
      choice1=input("Enter Temperature")
      print(simpleReflexAgent(choice1,False))
  elif choice == "3":
      print(simpleReflexAgent(percept[1],True))
  elif choice=="4":
      break
  # rule = simpleReflexAgent(visual_input)
  # print(rule)
  # print("Do you want to exit? Press 1")
  # choice=input("Enter For Exit , any other key if you want to continue")
  # if choice=="1":
         break
```

Choose from the following : sprinkler
Choose from the following : call
Choose from the following : call
Choose from the following : normal
Choose from the following :

## 0.1 PROBLEM 2

```
[]: percept=["Dry soil", "Moist soil", "Wet soil"]
     state=["watering ON","watering OFF","deactivates"]
     rules=["water","avoid overwatering","prevent waterlogging"]
     def getState(percept_value,value):
         index = -1
         for x in percept:
             # print(x)
             index = index+1
             if x == percept_value:
                     return state[index]
             # if value==True:
                  continue
             # elif int(percept_value) > percept[2]:
                       return state[2]
             # elif percept_value:
                   return state[int[index]]
```

```
def getRules(state_value):
    index = -1
    for i in state:
         index = index+1
        if i == state_value:
             # if i.lower() == percept[0] and state_value == percept[0]:
                   return rules[0]
             # elif i == percept[1] and int(state_value) > percept[1]:
                   return rules[1]
             # elif i.lower() == percept[2] and state_value == percept[2]:
                   return rules[2]
             return rules[index]
def simpleReflexAgent(percep,value):
    return getRules(getState(percep,value))
while (1):
    print("Choose from the following : ")
    # visual_input = input("What situation is it ? 1) Smoke , 2) High_{\sqcup}
  → Temperaure 3 ) Normal")
    choice=input("What situation is it ? 1 ) dry soil , 2 ) moist soil 3 ) wet_{\sqcup}
 ⇔soil")
    if choice=="1":
        print(simpleReflexAgent(percept[0],True))
    elif choice=="2":
         # choice1=input("Enter Temperature")
        print(simpleReflexAgent(percept[2],False))
    elif choice == "3":
        print(simpleReflexAgent(percept[1],True))
    elif choice=="4":
        break
    # rule = simpleReflexAgent(visual_input)
    # print(rule)
    # print("Do you want to exit? Press 1")
    # choice=input("Enter For Exit , any other key if you want to continue")
    # if choice=="1":
           break
Choose from the following :
water
Choose from the following :
```

water
Choose from the following:
prevent waterlogging
Choose from the following:
prevent waterlogging
Choose from the following:
avoid overwatering
Choose from the following:
avoid overwatering

Choose from the following :