Nancy Mazariegos 22513

# LABORATORIO#1

Algoritmo desinformado : Breadth- first search
(no considera costos)

- **Frontera:**
  1. Warm Up-0
  2. Step Mill - 4^0, TreadMill-3^0, ExBike-2^0, Skippingrope - 1^0
  3. TreadMill - 3^0, Exbike - 2^0, Skippingrope -1^0, Incline bench - 9^4
  4. Exbike - 2^0, Skippingrope - 1^0, Incline bench - 9^4, Pulling bar - 8^3
  5. Skippingrope - 1^0, Incline bench - 9^4, Pulling bar - 8^3, Cabel crossover - 7^2
  6. Incline bench - 9^4, Pulling bar - 8^3, Cabel crossover -7^2, Barbell - 6^1, Dumbell - 5^1
  7. Pulling bar - 8^3, Cabel crossover -7^2, Barbell - 6^1, Dumbell - 5^1, Hammer strength - 12^9
  8. Cabel crossover -7^2, Barbell - 6^1, Dumbell - 5^1, Hammer strength - 12^9, Climbing rope - 11^{8,7}
  9. Barbell - 6^1, Dumbell - 5^1, Hammer strength - 12^9, Climbing rope - 11^{8,7}
  10. Dumbell - 5^1, Hammer strength - 12^9, Climbing rope - 11^{8,7}, Leg press machine - 10^{6,5}
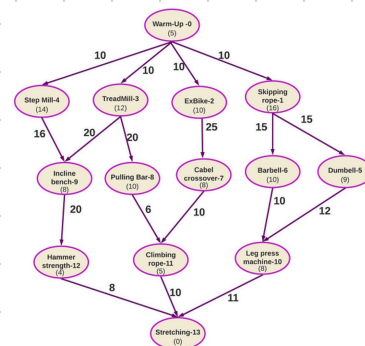
- **Visitados:**
  1. [ ]
  2. [Warm Up - 0]
  3. [Warm Up - 0, Step Mill - 4]
  4. [Warm Up - 0, Step Mill - 4, TreadMill - 3]
  5. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2]
  6. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2, Skipping rope - 1]
  7. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2, Skipping rope - 1, Incline bench - 9]
  8. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2, Skipping rope - 1, Incline bench - 9, Pulling bar - 8]
  9. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2, Skipping rope - 1, Incline bench - 9, Pulling bar - 8, Cabel Crossover - 7]
  10. [Warm Up - 0, Step Mill - 4, TreadMill - 3, Exbike - 2, Skipping rope - 1, Incline bench - 9, Pulling bar - 8, Cabel Crossover - 7]

  ∴ Warm Up - 0 → Step Mill - 4 → Incline bench - 9 → Hammer strength - 12 → Stretching - 13
  y su costo sería de: 54

Algoritmo informado : A*
- Frontera :　　　　　(optimiza)
   1. Warm Up - 0
   2. Exbike - 2, Tread Mill - 3, Step Mill - 4, Skipping rope - 1
   3. Tread Mill - 3, Step Mill - 4, Skipping rope - 1, Cabel crossover - 7
   4. Step Mill - 4, Skipping rope - 1, Cabel crossover - 7, Pulling bar - 8
   5. Skipping rope - 1, Cabel crossover - 7, Pulling bar - 8, Incline bench - 9
   6. Cabel crossover - 7, Pulling bar - 8, Incline bench - 9, Barbell - 6, Dumbell - 5
   7. Pulling bar - 8, Incline bench - 9, Barbell - 6, Dumbell - 5, Climbing rope - 11
   8. Incline bench - 9, Barbell - 6, Dumbell - 5, Climbing rope - 11
   9. Barbell - 6, Dumbell - 5, Climbing rope - 11

- Visitados :
   1. [ ]
   2. [Warm Up - 0]
   3. [Warm Up - 0, Exbike - 2]
   4. [Warm Up - 0, Exbike - 2, Tread Mill - 3]
   5. [Warm Up - 0, Exbike - 2, Tread Mill - 3, Step Mill - 4]
   6. [Warm Up - 0, Exbike - 2, Tread Mill - 3, Step Mill - 4, Skipping rope - 1]
   7. [Warm Up - 0, Exbike - 2, Tread Mill - 3, Step Mill - 4, Skipping rope - 1, Cabel crossover - 7]
   8. [Warm Up - 0, Exbike - 2, Tread Mill - 3, Step Mill - 4, Skipping rope - 1, Cabel crossover - 7, Pulling bar - 8]
   9. [Warm Up - 0, Exbike - 2, Tread Mill - 3, Step Mill - 4, Skipping rope - 1, Cabel crossover - 7, Pulling bar - 8, Incline bench - 9]

∴ Warm Up - 0 → Skipping rope - 1 → Barbell - 6 → Leg press machine 10 → Stretching - 13 y su costo sería de : 46