KNEE PROGRAM

1. **Patella Mobilization**
With leg straight and thigh musculature relaxed, place the finger of each hand on either side of patella (kneecap) and gently mobilize the patella side-to-side for 1 - 2 minutes. Repeat, mobilizing patella up & down for 1 - 2 minutes.

2. **Quadriceps Contraction (Quad Set)**
Straighten the knee by tightening the thigh muscle. It is important to make sure the kneecap moves and the tendon below the kneecap tightens. Perform the exercise 30 times, 3 times per day, or throughout the day as much as possible.

3. **Straight Leg Raises**
   A. **Flat on Back**
   - Bend one knee to a position of comfort.
   - Tighten the thigh muscle of the involved knee and lift 6-12 inches off the floor or bed.
   - Hold for 5 seconds, slowly lower and relax.
   - Increase to 25 repetitions as tolerated, 2 - 3 times per day.

   B. **Sit up on Elbows**
   - Raise involved leg to the level of opposite knee. **DO NOT HOLD!**
   - Return leg down slowly (approx. 3-5 secs)
   - Perform 3 sets of 10 repetitions, 2 - 3 TIMES PER DAY.
   - Eventually progress the leg raises to 25 Repetitions.

   C. **Sit All the Way Up with Elbows Straight**
   - Either sit with elbows straight or lean against the wall.
   - Do not lift the leg any higher than 6 inches off the floor.
   - Lift the leg **NONSTOP** 10 times, then relax.
   - Perform the exercise 3 sets of 10 repetitions.
   - Eventually progress the leg raises to 3 sets of 25 repetitions as the exercise becomes easier.
4. **HIP ADDUCTION**
   - Lie on your side with the involved leg on the bottom.
   - Place the foot of un-involved side on the surface in front of you, as close to the waist as possible.
   - Lock the knee of the involved knee and lift the foot as high as possible.
   - Hold for 5-10 seconds, lower SLOWLY, then repeat.
   - **DO 3 SETS OF 10 REPETITIONS 2- 3 TIMES PER DAY, WITH OR WITHOUT WEIGHTS.**

5. **Terminal Knee Extensions**
   - Place a Towel roll under the knee the size of your fist.
   - Push the back of your knee into the towel and pick the heel up, only 3-4 inches off the floor/bed.
   - HOLD for 5-10 seconds, slowly lower and relax. Perform 10 times.
   - Increase to 50 repetitions as tolerated.

6. **KNEE FLEXION (HAMSTRING CURLS)**
   - Stand with thigh next to a table.
   - Bend your knee to 90 degrees
   - Hold for 5 seconds, lower SLOWLY, and relax 10 times.
   - Increase to 25 repetitions as tolerated, 2-3 times per day.

7. **CHAIR FLEXION**
   - Place leg in a comfortable position.
   - Slide out to edge of chair – bending the knee.
   - Hold 5 seconds,10 times, 2-3 times per day.
8. **ISOMETRIC HAMSTRING CONTRACTIONS**

- In a sitting position - bend your knees.
- Flex the foot and toes back towards your other leg.
- Press your heel back towards your non-involved leg and HOLD 5-10 seconds, 10-25 times.

9. **HAMSTRING STRETCH**

- Sit on edge of chair with knee straight.
- Keep knee straight and lean over SLOWLY.
- A tight feeling should be felt. (A stretch)
- HOLD for 20 seconds and slowly relax. 3-4 times only 2-3 times per day.

10. **LYING HAMSTRING STRETCH**

- BRING ARMS TOWARDS LEG WHILE BENDING OTHER LEG.
- HOLD FOR 20 SECONDS, 3-4 TIMES, 2-3 TIMES PER DAY.

11. **Calf Raises**

- Stand with both knees straight.
- Raise up on toes and HOLD 5 seconds, 10 times.
- Increase to 25 repetitions as tolerated, 2-3 times per day.
1. Heel Slides
   - Lie on back with foot on the mat.
   - Slowly slide the foot towards your body as far as possible. Hold 5-10 seconds.
   - Use the other leg to assist it back up 10-25 times, 2 - 3 times per day.

1. Calf Stretch
   - Lean Against the wall, keeping one knee straight.
   - Bend the other knee and lean forward.
   - HOLD 20 seconds, 10-25 times 2 - 3 times per day.

14. Mini-Squat - 1/3 squat
    - Stand Straight, then bend knees.
    - HOLD for 3 seconds.
    - Return to standing position.