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<?xml version="1.0"?>
<robot name="min_kinematic">
  <!--All links of our model.-->
  <!--The root frame in ROS is called the base_link and represents the root frame (B_0) in
  our system. -->
  <link name="base_link"/>
  <!--The link 1 of our model. -->
  <link name="link_1"/>
  <!-- The working frame of our model is represented as a link.-->
  <link name="work_frame"/>

  <!--All joints of our model.-->
  <!--The revolute joint 1, which couples the base link (parent link) with the link 1
  (child link) is modeled here.
  The joint is located at the origin of the child link.-->
  <joint name="joint_1" type="revolute">
    <parent link="base_link"/>
    <child link="link_1"/>
    <!-- Selection of rotation axis, in our case around the joint is around the z-axis in
    positive direction.-->
    <axis xyz="0 0 1"/>
    <!-- The transformation between the parent and child link is given here.-->
    <!-- The translational components (xyz) are given in meters. -->
    <!-- The rotation is expressed by the Euler angles (rpy) in radians according to the
    following
    notation (r)oll (rot. x-axis), (p)itch (rot. y-axis), and (y)aw (rot. z-axis). -->
    <origin xyz="0 0 0.4" rpy="1.57079632679 0.0 0.0"/>
    <!-- The model of a movable joint must include further physical properties. -->
    <limit effort="100" lower="-0.175" upper="3.1416" velocity="0.5"/>
  </joint>

  <!-- The work frame lies at the end of link 1, hence in ROS this connection is modelled
  as a fixed joint. -->
  <joint name="joint_work_frame" type="fixed">
    <parent link="link_1"/>
    <child link="work_frame"/>
    <origin rpy="-1.57079632679 0.0 -1.57079632679" xyz="0.8 0 0.0"/>
  </joint>
</robot>

```