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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">
    <visual>
      <geometry>
        <box size="0.1 0.1 0.3"/>
      </geometry>
      <material name="grey">
        <color rgba="0.75 0.75 0.75 1"/>
      </material>
      <origin rpy="0 0 0 " xyz="0 0 0.15"/>
    </visual>
  </link>
  <link name="link_1">
    <visual>
      <geometry>
        <cylinder length="0.5" radius="0.02"/>
      </geometry>
      <material name="blue">
        <color rgba="0.08 0.12 0.5 1"/>
      </material>
      <origin rpy="0 1.57075 0 " xyz="0.25 0 0"/>
    </visual>
  </link>
  <link name="link_2">
    <visual>
      <geometry>
        <cylinder length="0.2" radius="0.02"/>
      </geometry>
      <material name="blue_2">
        <color rgba="0.08 0.12 0.75 1"/>
      </material>
      <origin rpy="0 1.57075 0 " xyz="0.1 0 0"/>
    </visual>
  </link>
  <!-- The working frame of our model is represented as a link.-->
  <link name="work_frame"/>

  <!--All joints of our model.-->
  <joint name="joint_1" type="prismatic">
    <parent link="base_link"/>
    <child link="link_1"/>
    <axis xyz="1 0 0"/>
    <origin xyz="0 0 0.3" rpy="0.0 0.0 0.0"/>
    <limit effort="100" lower="-0.175" upper="3.1416" velocity="0.5"/>
  </joint>

  <joint name="joint_2" type="revolute">
    <parent link="link_1"/>
    <child link="link_2"/>
    <axis xyz="0 0 1"/>
    <origin xyz="0.5 0 0" rpy="1.57079632679 0.0 0.0"/>
    <limit effort="100" lower="-1.5708" upper="1.5708" velocity="0.5"/>
  </joint>

  <!-- The working 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_2"/>
    <child link="work_frame"/>
    <origin rpy="-1.57079632679 0.0 -1.57079632679" xyz="0.2 0.0 0.0"/>
  </joint>
</robot>

```