FROM ubuntu:latest

ENV OS\_TYPE=linux-aarch64

ARG MICROMAMBA\_VERSION=1.4.4

# Install system dependencies

RUN apt-get update -y && apt-get install -y --no-install-recommends \

bzip2 \

curl \

wget \

ca-certificates \

x11-apps \

xauth \

xserver-xorg-video-dummy \

vim \

unzip \

openjdk-21-jdk && \

apt-get clean && rm -rf /var/lib/apt/lists/\*

# Install micromamba

RUN curl -Ls https://micromamba.snakepit.net/api/micromamba/${OS\_TYPE}/${MICROMAMBA\_VERSION} \

| tar -xvj -C /usr/local/bin --strip-components=1 bin/micromamba && \

chmod +x /usr/local/bin/micromamba

# Create conda environment and install packages using micromamba

ENV MAMBA\_ROOT\_PREFIX=/opt/conda

RUN micromamba create -y -p /opt/conda/envs/base -c conda-forge -c bioconda \

fastqc trimmomatic bowtie2 samtools picard && \

micromamba clean --all --yes

ENV CONDA\_PREFIX=/opt/conda/envs/base

ENV JAVA\_HOME=/usr/lib/jvm/java-21-openjdk-arm64/

ENV PATH=$CONDA\_PREFIX/bin:$JAVA\_HOME/bin:$PATH

COPY run\_pipeline.sh /usr/local/bin/

RUN chmod +x /usr/local/bin/run\_pipeline.sh

CMD ["run\_pipeline.sh"]