```
!*********************************************************************
! File XDS.INP  containing named arguments for running XDS (arbitrary order).
! For further explanations of the meaning of these parameters see xds.man.
! Characters in a line to the right of an exclamation mark are comment.
!*********************************************************************

 DETECTOR=ADSC  MINIMUM_VALID_PIXEL_VALUE=1  OVERLOAD=65000
 DIRECTION_OF_DETECTOR_X-AXIS= 1.0 0.0 0.0
 DIRECTION_OF_DETECTOR_Y-AXIS= 0.0 1.0 0.0
 ROFF=0.0 TOFF=0.0!Radial & tangential offset for spiral read-out scanners

 MAXIMUM_NUMBER_OF_PROCESSORS=16!<25;ignored by single cpu version of xds

!===================== JOB CONTROL PARAMETERS ============================
! JOB= ALL !XYCORR INIT COLSPOT IDXREF DEFPIX XPLAN INTEGRATE CORRECT
 JOB= XYCORR INIT COLSPOT IDXREF
! JOB= IDXREF
! JOB= DEFPIX     AN INTEGRATE CORRECT
! JOB= CORRECT

!===================== GEOMETRICAL PARAMETERS ============================
 NX=3072 NY=3072 QX=0.102592 QY=0.102592   !ADSC Q315 version
 ORGX=1539.81 ORGY=1534.30  !Detector origin (pixels).
 DETECTOR_DISTANCE=141.025000              !Distance of detector from crystal (mm)

 ROTATION_AXIS= -1.0 0.0 0.0
 OSCILLATION_RANGE=1.000000               !degrees (>0)

 X-RAY_WAVELENGTH=0.979263         !Angstroem
 INCIDENT_BEAM_DIRECTION=0.0 0.0 1.0
 FRACTION_OF_POLARIZATION=0.95 !default=0.5 for unpolarized beam
 POLARIZATION_PLANE_NORMAL= 0.0 1.0 0.0
 AIR=0.001        !Air absorption coefficient of x-rays

!===================== CRYSTAL PARAMETERS ============================
!If you do not know the space group, you may comment out the next two lines
! SPACE_GROUP_NUMBER=0    !0 for un    n crystals; cell constants are ignored.
! UNIT_CELL_CONSTANTS= 0 0 0 0 0 0
!Optional reindexing transformation to apply    reflection indices
! REIDX=    0  0 -1  0  0 -1  0  0 -1  0  0  0

!==================== DATA COLLECTION STRATEGY (XPLAN) ====================
!                     !!! Warning !!!
! If you processed your data for a crystal with unknown cell constants and
! space group symmetry, XPLAN will rep    the results for space group P1.
!FRIEDEL'S_LAW=FALSE !Default is TRUE.


!==================== SELECTION OF DATA IMAGES ============================
!Generic file name, access, and format of data images
 NAME_TEMPLATE_OF_DATA_FRAMES=../img/prefix_1_?????.img
 DATA_RANGE=1  180        !Numbers of first and last data image collected

 BACKGROUND_RANGE=1  5  !Numbers of first and last data image for background

 SPOT_RANGE=1  10        !First and last data image number for finding spots
 SPOT_RANGE=91  100       !First and last data image number for finding spots
         !Up to 20 SPOT_RANGE= parameters can be specified

!===================== INDEXING PARAMETERS ============================
!Never forget to check this, since the default 0 0 0 is almost always correct!
 INDEX_ORIGIN= 0 0 0              ! used by IDXREF to add an index offset

!================= CRITERIA FOR ACCEPTING REFLECTIONS ====================
 VALUE_RANGE_FOR_TRUSTED_DETECTOR_PIXELS= 7000 30000 !Used by DEFPIX
         !for excluding shaded parts of the detector.

 TRUSTED_REGION= 0.0 1.41

 INCLUDE_RESOLUTION_RANGE=50.0 0.0 !Angstroem; used by DEFPIX,INTEGRATE,CORRECT

!used by CORRECT to exclude ice-reflections
!EXCLUDE_RESOLUTION_RANGE= 3.93 3.87 !ice-ring at 3.897 Angstrom
!EXCLUDE_RESOLUTION_RANGE= 3.70 3.64 !ice-ring at 3.669 Angstrom
!EXCLUDE_RESOLUTION_RANGE= 3.47 3.41 !ice-ring at 3.441 Angstrom
!EXCLUDE_RESOLUTION_RANGE= 2.70 2.64 !ice-ring at 2.671 Angstrom
!EXCLUDE_RESOLUTION_RANGE= 2.28 2.22 !ice-ring at 2.249 Angstrom

!============== INTEGRATION AND PEAK PROFILE PARAMETERS ===================
!Parameters that are refined during the INTEGRATE step.
```

```
!Refinement is turned off if none of the keywords is specified.
 REFINE(INTEGRATE)=DISTANCE BEAM ORIENTATION CELL !AXIS

 DELPHI= 5.000000 !controls the number of reference profiles and scaling factors
```

****

Most important things to know about XDS.INP (the rest can be found in the documentation, where the exhaustive list of input parameters are described, if needed)

Everything written after a ! is comment, i.e. not taken into account

Highlighed in cyan:
Input parameters describing the experimental setup. In principle, they do not require editing, since they should reflect the actual setup.

Highlighted in yellow:
Inout parameters defining the use of the different dectector regions. In principle, no editing is required.

Highlighted in green:
Parameters to be possibly edited. See comments for each input parameters for more informations.