Explain the following in manifest.yaml which we use to deploy the Java SpringBoot based application in PCF

JAVA\_OPTS: "-XX:+UseG1GC -Dcom.sun.security.enableAIAcaIssuers=true -Dcom.sun.security.enableCRLDP=true”

In the manifest.yaml file, you use JAVA\_OPTS to set Java Virtual Machine (JVM) options when deploying a Java SpringBoot-based application in PCF (Pivotal Cloud Foundry). Here's a breakdown of each option:

1. -XX:+UseG1GC: This option specifies the garbage collector to use. In this case, it's G1GC (Garbage-First Garbage Collector), which is designed to provide better performance and predictability by dividing the heap into regions.
2. -Dcom.sun.security.enableAIAcaIssuers=true: This system property enables the fetching of Authority Information Access (AIA) certificates issuers. AIA extensions in certificates provide information about where to find additional certificates, such as those of Certificate Authorities (CAs).
3. -Dcom.sun.security.enableCRLDP=true: This system property enables the fetching of Certificate Revocation Lists (CRLs) from Distribution Points (CRLDP) specified in certificates. CRLs contain lists of certificates that have been revoked by the issuing CA. Enabling this property ensures that the JVM checks for certificate revocation information when validating certificates.

These options are used to configure the JVM environment for your SpringBoot application running on PCF, ensuring proper garbage collection, certificate validation, and security configurations.