HOW TO MAKE PIPELINE IN JENKINS:-

The below syntax is written in groovy, in which we have triggered the jobs that were already build:-

First of all we have to select pipeline project while creating a new item,

```
pipeline {
    agent any
    stages {
        stage('building data_management_qa') {
            steps {
                build job: 'data_management_qa'
            }
        }
        stage('building security_framework_qa') {
            steps {
                build job: 'security_framework_qa'
            }
        }
        stage('building subscription_billing_qa') {
            steps {
                build job : 'subscription_billing_qa'
            }
        }
        stage('building media_processor_qa') {
            steps {
                build job: 'media_processor_qa'
            }
        }
        stage('building fe_api_qa') {
            steps {
                build job: 'fe_api_qa'
            }
        }
        stage('building cms_api_qa') {
            steps {
                build job: 'cms_api_qa'
            }
        }
    }
}
```

In the above syntax we have defined stages that means what we are going to do in that particular stage, and in the steps we have defined the action that we want to perform, like we want to build a job or trigger a job, so that thing we have to define in the steps as we did in **build job** ex:- build job: 'data_management_qa' in this we have triggerd a job that was build with the name **"data_management_qa"**

HOW TO MAKE PIPELINE IN JENKINS (BY PASSING THE PARAMETERS):-

First of all we have to select pipeline project while creating a new item, and after that we have to select the option **"This project is parameterized"** and in that we have to select string parameters and we have to pass parameters in that ex:- Name: TAG_NUMBER Name: TAG_MESSAGE

And if you want to build only few jobs then you need to add boolen parameter in the parameter option by clicking on add parameters and then you have to give the name of that particular job And you have to define **when** and **anyOf** in it

BELOW IS THE SYNTAX IN GROOVY FOR PIPELINE IN JENKINS ALONG WITH PARAMETERS:-

```
pipeline {
    agent any
    stages {
        stage('building prod_data_management_build_job') {
            steps {
                build job: 'prod_data_management_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_security_framework_build_job') {
            steps {
                build job: 'prod_security_framework_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
```

```
            }
        }
        stage('building prod_subscription_billing_build_job') {
            steps {
                build job : 'prod_subscription_billing_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_media_processor_build_job') {
            steps {
                build job: 'prod_media_processor_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_fe_api_build_job') {
            steps {
                build job: 'prod_fe_api_build_job', parameters: [[$class: 'StringParameterValue', name:
'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_cms_api_build_job') {
            steps {
                build job: 'prod_cms_api_build_job', parameters: [[$class: 'StringParameterValue',
name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
    }
}
```

In the above syntax we have defined stages that means what we are going to do in that particular stage, and in the steps we have defined the action that we want to perform, like we want to build a job or trigger a job, so that thing we have to define in the steps as we did in **build job** ex:- build job: ‘prod_data_management_build_job’ in this we have triggerd a job that was build with the name **“prod_data_management_build_job”** along with the parameters that are TAG_NUMBER, TAG_MESSAGE

BELOW IS THE SYNTAX IN GROOVY FOR PIPELINE IN JENKINS ALONG WITH PARAMETERS AND “when” and “anyOf”:-

```
pipeline {
    agent any
    stages {
        stage('building prod_data_management_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.DATA_MANAGEMENT == true}

                }
            }
            steps {

                build job: 'prod_data_management_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
    }
        stage('building prod_security_framework_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.SECURITY_FRAMEWORK == true}
                }
            }
            steps {
                build job: 'prod_security_framework_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_subscription_billing_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.SUBSCRIPTION_BILLING == true}
                }
            }
```

```
            steps {
                build job : 'prod_subscription_billing_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_media_processor_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.MEDIA_PROCESSOR == true}
                }
            }
            steps {
                build job: 'prod_media_processor_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ]]
            }
        }
        stage('building prod_fe_api_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.FE_API == true}
                }
            }
            steps {
                build job: 'prod_fe_api_build_job', parameters: [[$class: 'StringParameterValue', name:
'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('building prod_cms_api_build_job') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.CMS_API == true}
                }
            }
            steps {
                build job: 'prod_cms_api_build_job', parameters: [[$class: 'StringParameterValue',
name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
```

```
      }
   }
}
```

HOW TO MAKE A SINGLE PIPELINE IN WHICH BOTH BUILD AND DEPLOYMENT ARE DONE IN A SINGLE CHECK:-

```
pipeline {
   agent any
   stages {
      stage('building prod_data_management_build_job') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
               expression {params.DATA_MANAGEMENT == true}
            }
         }
         steps {
            build job: 'prod_data_management_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
         }
      }
      stage('deploying DataMS-K8S-Full-Deployment') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
               expression {params.DATA_MANAGEMENT == true}
            }
         }
         steps {
            build job: 'DataMS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
         }
      }
      stage('building prod_security_framework_build_job') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
```

```
                expression {params.SECURITY_FRAMEWORK == true}
            }
        }
        steps {
            build job: 'prod_security_framework_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
        }
    }
    stage('deploying SecurityMS-K8S-Full-Deployment') {
        when {
            anyOf {
                expression {params.ALL_APPS == true}
                expression {params.SECURITY_FRAMEWORK == true}
            }
        }
        steps {
            build job : 'SecurityMS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
        }
    }
    stage('building prod_subscription_billing_build_job') {
        when {
            anyOf {
                expression {params.ALL_APPS == true}
                expression {params.SUBSCRIPTION_BILLING == true}
            }
        }
        steps {
            build job : 'prod_subscription_billing_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
        }
    }
    stage('deploying Subscription-Billing-MS-K8S-Full-Deployment') {
        when {
            anyOf {
                expression {params.ALL_APPS == true}
                expression {params.SUBSCRIPTION_BILLING == true}
            }
        }
        steps {
```

```
            build job : 'Subscription-Billing-MS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
         }
      }
      stage('building prod_media_processor_build_job') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
               expression {params.MEDIA_PROCESSOR == true}
            }
         }
         steps {
            build job: 'prod_media_processor_build_job', parameters: [[$class:
'StringParameterValue', name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class:
'StringParameterValue', name: 'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
         }
      }
      stage('deploying MediaProcessor-MS-K8S-Full-Deployment') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
               expression {params.MEDIA_PROCESSOR == true}
            }
         }
         steps {
            build job: 'MediaProcessor-MS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
         }
      }
      stage('building prod_fe_api_build_job') {
         when {
            anyOf {
               expression {params.ALL_APPS == true}
               expression {params.FE_API == true}
            }
         }
         steps {
            build job: 'prod_fe_api_build_job', parameters: [[$class: 'StringParameterValue', name:
'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
         }
      }
      stage('deploying FE-API-MS-K8S-Full-Deployment') {
```

```
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.FE_API == true}
                }
            }
            steps {
                build job: 'FE-API-MS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
            }
        }
        stage('building prod_cms_api_build_job') {
            when  {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.CMS_API == true}
                }
            }
            steps {
                build job: 'prod_cms_api_build_job', parameters: [[$class: 'StringParameterValue',
name: 'TAG_NUMBER', value:  "${TAG_NUMBER}" ],[$class: 'StringParameterValue', name:
'TAG_MASSEGE', value:  "${TAG_MASSEGE}"]]
            }
        }
        stage('deploying CMS-API-MS-K8S-Full-Deployment') {
            when {
                anyOf {
                    expression {params.ALL_APPS == true}
                    expression {params.CMS_API == true}
                }
            }
            steps {
                build job: 'CMS-API-MS-K8S-Full-Deployment', parameters: [[$class:
'StringParameterValue', name: 'BUILD_TAG', value:  "${BUILD_TAG}" ]]
            }
        }
    }
}
```

In the above syntax we have passed the same parameters in both the stage, now if we will check the box of that particular parameter so both the build and deployment will be done in a

single step, and if we will check the box of ALL_APPS then both build and deploy of all the jobs will be done.