Installation

```
curl -s "https://raw.githubusercontent.com/kubernetes-
sigs/kustomize/master/hack/install_kustomize.sh"  | bash
```

Basic Usage

Built Into kubectl

Kustomize is built into `kubectl`. `kubectl apply -k` acts the same was as `kustomize build`
`path/to/some/app | kubectl apply -f -`.

Create Base

From Kubernetes Manifests
Search all Kubernetes resources in the current directory and add them to `resources`

```
kustomize create --autodetect
```

From Kustomization Base
Use `path/to/base` of another kustomization overlay as base to the new one

```
kustomize create --resources path/to/base
```

Search current directory and all sub-directories

```
kustomize create --resources path/to/base --recursive
```

Build Resources

URL

```
kustomize build https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld?ref=v1.0.6
```

Modifying Base

Labels & Annotations

Create new kustomization.yaml from remote resources, adding to all the resources labels `app=hello-world` and `cloud=gcp`

```
$ kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6 --labels app:hello-
world,cloud:gcp
$ kustomize build .
```

Namespace

Create new kustomization.yaml from remote resources, adding `namespace` attribute to all its resources

```
kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6 --namespace dev
kustomize build .
```

Resource Names

```
$ kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
$ kustomize edit set nameprefix temp
$ kustomize build .
```

Images

Update the image `monopole/hello:1` to `monopole/hello:latest`

```
$ kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
$ kustomize edit set image monopole/hello:1=monopole/hello:latest
$ kustomize build .
```

ConfigMap & Secret

Generate ConfigMap manifests from variables

```
$ kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
$ kustomize edit add configmap hello-world --behavior create --from-
literal=host=google.com
$ kustomize build .
```

JSON Patch

Update the number of the replicas

```
$ cat <<EOF > patch.yaml
- op: replace
  path: /spec/replicas
  value: 1
EOF
$ kustomize create --resources https://github.com/kubernetes-
sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
$ kustomize edit add patch --kind Deployment --path patch.yaml
$ kustomize build .
```

Strategic Merge

Add `emptyDir` volume

```
$ cat <<EOF > patch.yaml
apiVersion: apps/v1
kind: Deployment
metadata:
  name: the-deployment
spec:
```

```
      template:
        spec:
          containers:
          - name: the-container
            volumeMounts:
            - name: emptyDir
              mountPath: /appdata
          volumes:
          - name: emptyDir
            emptyDir: {}
  EOF
  $ kustomize create --resources https://github.com/kubernetes-
  sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
  $ kustomize edit add patch --kind Deployment --path patch.yaml
  $ kustomize build .
```

Remove Resource

Completly omit resources from the final manifest set

```
  $ cat <<EOF > patch.yaml
  \$patch: delete
  apiVersion: v1
  kind: ConfigMap
  metadata:
    name: the-map
  EOF
  $ kustomize create --resources https://github.com/kubernetes-
  sigs/kustomize.git/examples/helloWorld\?ref\=v1.0.6
  $ kustomize edit add patch --kind ConfigMap --path patch.yaml
  $ kustomize build .
```