

Example 1:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "s3:PutObject",
        "s3:PutObjectAcl",
        "s3:GetObject",
        "s3:GetObjectAcl",
        "s3:DeleteObject"
      ],
      "Resource": "arn:aws:s3:::holidaygifts/*"
    },
    {
      "Effect": "Deny",
      "Action": [
        "s3:GetObject",
        "s3:GetObjectAcl"
      ],
      "Resource": "arn:aws:s3:::holidaygifts/*",
      "Condition": {
        "DateGreaterThan": {"aws:CurrentTime": "2020-12-01T00:00:00Z"},
        "DateLessThan": {"aws:CurrentTime": "2020-12-25T06:00:00Z"}
      }
    }
  ]
}
```

What is the output of this policy?

Points to remember:

- Always Explicit Deny wins
- Default Deny is overwritten by Explicit Allow
- Explicit Allow is overwritten by Explicit Deny
- Look at the resource and make sure are they same or not in the multiple statements and the actions too
- Also, look at the conditions carefully

Example 2:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Sid": "DenyNonApprovedRegions",
      "Effect": "Deny",
      "NotAction": [
        "cloudfront:*",
        "iam:*",
        "route53:*",
        "support:*"
      ],
      "Resource": "*",
      "Condition": {
        "StringNotEquals": {
          "aws:RequestedRegion": [
            "ap-southeast-2",
            "eu-west-1"
          ]
        }
      }
    }
  ]
}
```

What is the output?

Point out the NOT operations

These are double negation policy

Example 3:

```
{
  "Version": "2012-10-17",
  "Statement": [
    {
      "Effect": "Allow",
      "Action": [
        "s3:ListAllMyBuckets",
        "s3:GetBucketLocation"
      ],
      "Resource": "*"
    },
    {
      "Effect": "Allow",
      "Action": "s3:ListBucket",
      "Resource": "arn:aws:s3:::cl-animals4life",
      "Condition": {
        "StringLike": {
          "s3:prefix": [
            "",
            "home/",
            "home/${aws:username}/*"
          ]
        }
      }
    },
    {
      "Effect": "Allow",
      "Action": "s3:*",
      "Resource": [
        "arn:aws:s3:::cl-animals4life/home/${aws:username}",
        "arn:aws:s3:::cl-animals4life/home/${aws:username}/*"
      ]
    }
  ]
}
```

NOTE: In S3 what are the actions that we need to use Resource as **"*"** Always?

1. S3: ListAllMyBuckets - This only list the buckets and we can't look inside the bucket
2. S3: GetBucketLocations
3. S3: CreateBucket