	DAY-8
▼ Te	ereratorm. Cloud Computing
	Public GCP AWS Azure Services (program) EC2-compute (Its a program) (program) (program) (program)
→ →	Service is a kind of program. Eg: EC2 (compute service, AWS) EBS (block storage service) Service
	(program) Application Programming Interface (API) > SDK
hle	but MobApp CLI 4 PHP (flutter)
<i>></i>	API (Application Programming Interface) To work with any cloud service provider Eg: Aws, GCP, etc
→ →	Interact with AWS and services. To connect to AWS or any other cloud service provides,

	Page Page
	(hlebApp)
	AWS 7 Deploy
	EC2, EBS, S3, CF, Infrastructure
	vpc, etc
→	To launch one project, many service Integration is needed to establish Infrastructure for it
→	Sometimes, me may want different services
	Sometimes, me may mant different services from different Cloud Service Provider (CSP's)
	or some part from public and some part of private cloud, cloud
	to deploy your project.
	Eg:- We are taking some services from AWS and some from GOP or Azure or openetack.
	Hybrid Cloud: - use of more than one
	Hybrid Cloud: - use of more than one cloud to deploy project Infrastructure
D	Challenge's :-
	Each Public Cloud Service provider or private CSP have different WebVI and CLI.
با	Therefore decomposition of the second of the
	learn every claud and claud allace to
	This is a Droblem 7 7 Huberd Pland 4.10
	Solution 1
	Therefore, for a company person they have to learn every cloud and cloud program to use [This is a problem] 1 Hybrid Cloud Infra. Solution 1 Terraform

CCLI)
A type of tool/program to get command oner every cloud service provider (CSP's)
ones ever claud convice provider (CSPS)
De carron (una al ma tool)
Classian tuse of one tool Deparam to
Standardized tool to contife of
program (use of one tool)? Standardized tool to code program to every CSP is Terraform.
Cloud Infrastructure Kubernetis
Cloud Infrastructure
Aws redhat (900n Redhat (900n Command) Ger Private Cloud
Aws I manage Public Openshift
GCP Private claud
(oun command)
Tongalogm
Terraform
V
Its a software Itool
11 1 2 Co. 1
Mashi cosp (out guidality) -> to herele
Hashicorp Configuration -> to herite Language (HCL) Code.
Kubernetes, AWS, Oracle Cloud, GCP, Azure, etc
- Kubernetes, AWS, Oracle Cloud, GCP, Azure, etc. > providers in Terraform.
Example :-
When he Create an application in enterprise
ue create it for client, worldwide users
sefore deployment all its it in our
personal environment and do hit and trial For worldwide deployment, we have to do every Infra deployment again - Solution I Infrastructure as a code
tor worldwide deployment, he have to
do every Infra d'ephognent again - Solution I
Infrastructure as a code
V

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3		

world)

#	Dont use AWS CII or CSP hlebVI to launch your Infrastructure (not recommended) / manual deployment (not recommended)
	your Infrastructure (not recommended)
	manual deployment (not recommended)
	(PHP)
>	We should write our own code in Python or
	any other language in any Infrastructure
	the should write our own code in Python. or any other language in any Infrastructure
	Infrastructure as a Code
	He have different SDK for python for
	Infraskucture deployment or Infraskucture as a
	He have different SDK for python for Infrastructure deployment or Infrastructure as a
D	Infraskucture deployment or Infraskucture as a Code. Terraform > Infraskucture as a code. Terraform The we do everything writing a code Provide Standardization (use of one language To work on every To work on every To work on every To work on every To code + run = Ec2
(Terraform
	the do everything writing a code
	Provide Standardization (use of one language
	To work on every
	(to launch) Infrastructure)
	(code + run = EC2
\rightarrow	They are intelligent and store/copy the Instance
	ID.V V
→	They record instance details; they keep on tracking.
	In one click, whole Infra destroys ← power record → In → Torack
	of Terraform
	record - 194 - 194ack
	record - In - Track Grecord - In - Track deskay: deskay:
->	FON DA A A A A A
/	For management of cloud (all cloud in the

	• • • • • • • • • • • • • • • • • • • •
D	Terraform -> download from site.
	(tool)
->	extract it somewhere.
->	blundows → environment variable → (to set patti)
	Command prompt.
	COLLING COLLING
	(folder) (workspace)
	(Code) - we have to tell.
	terraporm which
\rightarrow	ed Destlop Cloud we have to
→	mkdir tera manage
\rightarrow	scd tera
-	dis Revoider in Jereraform
-	mkdå mytest
->	
→	notepad ec2. tf (.H extension necessary)
	notepad ec2. tf (.H extension necessary)
<u></u> ^	PCO-HD Notanad
	ec2-tf Notepad
١,	Provider aus.
	200000 Kan 25 Kan 25 Kan 2
	secret key efcab343620, zxyaf logic for writing code.
	Secret Rey Efcab 343620, 2xyaf Code.
	region = ap-south - 1

	Frample ande
	Terrajorn -> Providers -> Example code
	J
	They know our AWS API.
	c allenda
	(Code) Copy SCM J
	your access key and password solution can be usible
	solution can be unible
	2
	aws configure
	give access key, secret key
	give access key, secret key and tell terrajorm about it.
	DO
	OR TANA A A AT MARINE
	use Aws IAM and create multiple users with different powers.
	with different powers.
>>	aus contions profile maprofile
//	aus configure profile supprofile
	Contains
	access, secret key
	leurs la continue de de la continue
Г	HOGICANNI COCE
	provider "aws'? region = " " HCl lauguage. profile = " "
	HCL layouage
	region = " HCL lauguage.
-	profile -
	7
_	J
->	terraform unit (injalising code / folder)
	100 coops and
•	plugins made terraform intelligent
	(program created
	(program created by any CSP expert)
	Made fever alsom
	Made tevoratorm intelligent
	John.

[terraform init] command

for first time we create code we

write this command

command will search for file with

the extension search for provider in off file download plugins for the provider they found in the the file. Using (terraform) I would like to go to (AWS) and interact with it's service aunch instance EC2. - terraform apply (command) o MCl → declarative language Languages divise Terraform 0 (not Imperative Intelligent) I Python declaratine (Intelligent) (me put our desires) Keep on launching OS not checking of its presence first checks if the Os is there of not of the name and then launches.

	> Terraform -> Providers -> AWS -> EC2 -> Resources.
	Site
	· Variables = = arguments Copy Syntax
	Variables = = arguments Eg: - Key-name, ami, etc.
	(space) "my instance" (Jufrastructure) resource "aws - instance" of regnant as a code) ami = "ami-07assabza12" 1 instance - type = "t2. micro" Infuture key-name = "mykey-pem" security - groups = ["launch-wixard - 2"] of tags = 5
Keyword	resource "aws_instance" & regnone as a code)
	ami = "ami-07a839bza12"
	instance - type = "t20 micro" In future
	Key-name = "mykey-pem"
	security - groups = ["launch-wixard - 2"]
	70073
	Name = "Linux OS 1" as list therefore [" "]
	3
	→
	-> terraform apply -[command]
	V .
0	they know about it
	they know about it
	\mathbf{J}
	Stores the record
	"State file"
	D (terraform·tfstate)
	o terraform destroy [command]
	destroys the infrastructure in one go.
	V