Develop, test, and publish Azure Functions by using Azure Functions Core Tools

What are the Azure Functions Core Tools?

The Azure Functions Core Tools are a set of command-line tools that you can use to develop and test Azure Functions on your local computer.
The Core Tools feature a variety of functions-related capabilities, but their primary purpose is to:

1. Generate the files and folders you need to develop functions on your local computer
2. Run your functions locally so you can test and debug them
3. Publish your functions to Azure

Local function folder= functionapp
All of the functions in a function app share a common set of configuration values, and must all be built for the same language runtime. A function app is an Azure resource that can be configured and managed independently.

Now we will go step by step to create a function app:
Create a directory local
Mkdir functionappfolder
Cd functionappfolder
func init
#set up environment and programming language

```
func new
#creates a new trigger and name it


#And past the code below by opening editor code .
module.exports = async function(context, req) {
  // Try to grab principal, rate, and term from the query string and
  // parse them as numbers
  const principal = parseFloat(req.query.principal);
  const rate = parseFloat(req.query.rate);
  const term = parseFloat(req.query.term);

  if ([principal, rate, term].some(isNaN)) {
    // If any empty or non-numeric values, return a 400 response
        with an
    // error message
    context.res = {
      status: 400,
      body: "Please supply principal, rate and term in the query
        string"
    };
  } else {
    // Otherwise set the response body to the product of the three
        values
    context.res = { body: principal * rate * term };
  }
}


func start &> ~/output.txt &.   #runs in background

curl "http://localhost:7071/api/simple-interest?
        principal=5000&rate=.035&term=36" -w “\n"
```

Publish it:

In azure portal cli run th following commands

```
RESOURCEGROUP=learn-b20af463-3bf1-4d0d-88aa-
      fca7794c268e
STORAGEACCT=learnstorage$(openssl rand -hex 5)
FUNCTIONAPP=learnfunctions$(openssl rand -hex 5)

az storage account create \
  --resource-group "$RESOURCEGROUP" \
  --name "$STORAGEACCT" \
  --kind StorageV2 \
  --location centralus

az functionapp create \
  --resource-group "$RESOURCEGROUP" \
  --name "$FUNCTIONAPP" \
  --storage-account "$STORAGEACCT" \
  --runtime node \
  --consumption-plan-location centralus \
  --functions-version 3
```

Finally publish :

cd ~/loan-wizard

func azure functionapp publish learnfunctions