



Assignment Topic: Install node- red and print hello world

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Submitted by:

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Programme:

BBA (AI)

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Foundation of AI

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Date of Submission:



PRACTICAL – 5

Objective: Install node-red and print hello world.

Step 1: To get the node-red, the node.js is required to be installed in your pc. To check if node.js is installed, run ‘ node - -version ’ in cmd.

```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 10.0.19045.5247]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pc>node --version
v18.17.1

C:\Users\pc>
```

If not installed then go to the browser and download node.js.

```
[C:\Windows\system32\cmd.exe]
Microsoft Windows [version 10.0.19045.5247]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pc>node --version
v18.17.1

C:\Users\pc>npm install -g --unsafe-perm node-red
```

Step 2: Install the node-red with the below mentioned command. npm install -g --unsafe-perm node-red

Wait for the installation completion.

```
[C:\Windows\system32\cmd.exe]
Microsoft Windows [version 10.0.19045.5247]
(c) Microsoft Corporation. All rights reserved.

C:\Users\pc>node --version
v18.17.1

C:\Users\pc>npm install -g --unsafe-perm node-red
npm WARN cleanup Failed to remove some directories [
  npm WARN cleanup   [ 'C:\Users\pc\AppData\Roaming\npm\node_modules\.node-red-j3fappus',
  npm WARN cleanup   [ 'error: EPERM: operation not permitted, unlink 'C:\Users\pc\AppData\Roaming\npm\node_modules\.node-red-j3fappus\node_modules\node-red-rs\bcrypt-wln32-x64-msvc\bcrypt.wln32-x64-msvc.node''],
  npm WARN cleanup   errno: -4048,
  npm WARN cleanup   code: 'EPERM',
  npm WARN cleanup   syscall: 'unlink',
  npm WARN cleanup   path: 'C:\Users\pc\AppData\Roaming\npm\node_modules\.node-red-j3fappus\node_modules\node-red-rs\bcrypt-wln32-x64-msvc\bcrypt.wln32-x64-msvc.node'
  npm WARN cleanup ]
  npm WARN cleanup ]
  npm WARN cleanup ]
  npm WARN cleanup ]

added 1 package, and changed 330 packages in 3m

69 packages are looking for funding
  Run 'npm fund' for details

C:\Users\pc>
```

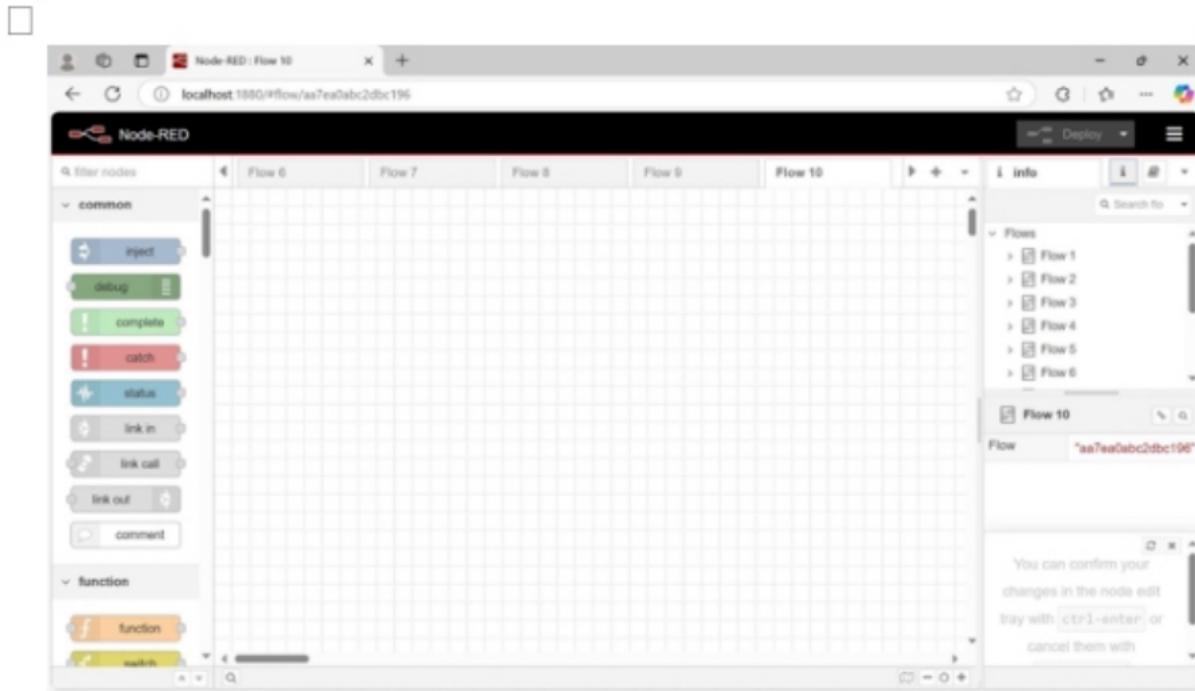
```
$ curl -X POST -u "apikey:{apikey}" \
--header "Content-Type: audio/flac" \
--data-binary @'{path_to_file}audio-file.flac' \
"{url}/v1/recognize"
```

```
File Edit View

curl -X POST -u "apikey:{apikey}" \
--header "Content-Type: audio/flac" \
--data-binary @'{path_to_file}audio-file.flac' \
"{url}/v1/recognize"
```

Step 3: Run node-red on cmd.

Now access the given url on browser (**127.0.0.1:1880 or localhost:1880**)



Step 4: Drag and drop the nodes in the playground i.e. flow.

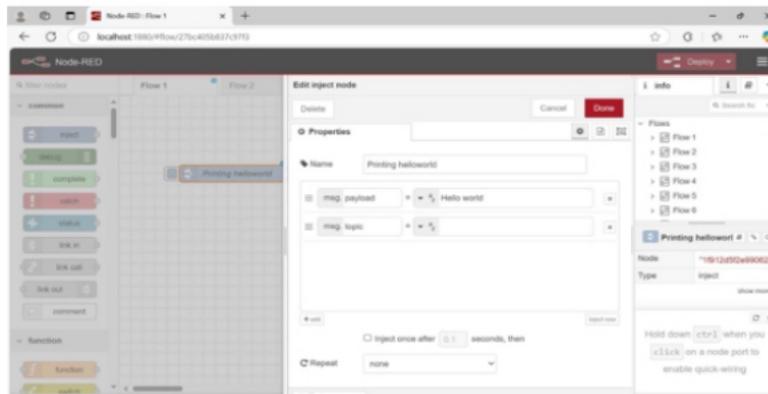
1. Inject node
2. Debug node

The screenshot shows the Watson Studio interface for a project named "Speech to Text-w9". On the left, there's a sidebar with "Manage" selected, followed by "Getting started", "Service credentials", and "Plan". The main area has a title "Start by viewing the tutorial" with "Getting started tutorial" and "API reference" buttons. Below that is a "Credentials" section with fields for "API key" (containing a redacted value) and "URL" (containing "https://api.au-syd.speech-to-text.watson.cloud.ibm.com/instances/..."). Red arrows point to both of these fields. To the right, there's a "Deploy" button, a search bar, and a list of flows: Flow 1 (selected), Flow 2, Flow 3, Flow 4, Flow 5, and Flow 6. A message at the bottom says "You can remove the selected nodes or links with delete".

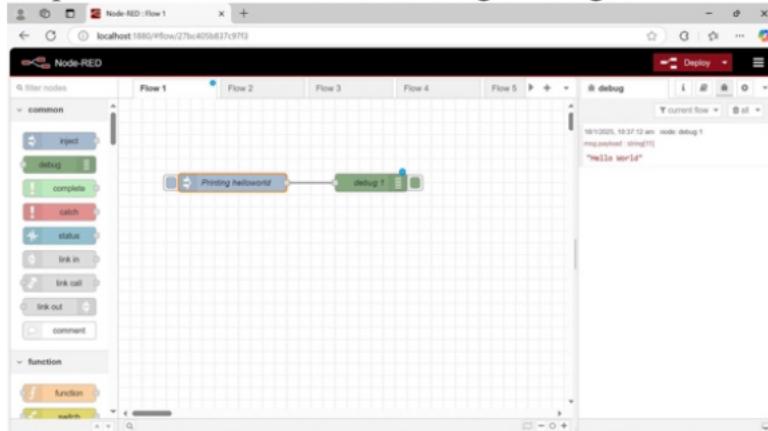
for git Bash

```
curl -X POST -u "apikey:OGz7Fys33CL0_UscNCmh6tCKxqC20eWX7KJL1_Ou8HOG" \
--header "Content-Type: audio/wav" \
--data-binary @C:/Users/pc/hello_world.wav \
"https://api.au-syd.speech-to-text.watson.cloud.ibm.com/instances/5082370b-8ad4-412a-8c9e-3d70afc6e10e/v1/recognize"
```

Step 5: Double click on inject node and change the datatype as string from dropdown and input “Hello World”.



Step 6: Deploy then click on the right button of the debug node and left button of the inject node. The output will be shown on the debug messages.



This completes the installation and the printing ‘hello world’ practical.

