Work Sample

Thank you for taking the time to complete this work sample. We hope that this task will give you the opportunity to show us your skills and experience. Here comes the instructions, don't hesitate to ask questions:

Build an application that exposes three endpoints:

- **calc** is an endpoint that performs individual calculations:
  - The call http://localhost/calc?op=sum&term=10&term=2 should sum the terms and return **12**.
  - The call http://localhost/calc?op=multiply&factor=10&factor=2 should multiply the factors and return **20**.
  - The code to perform the actual calculation should be fetched from a location outside the container (like an S3 bucket or the local filesystem) and loaded at runtime. The available operations are determined by which script scripts the application finds at that location.
  - It should be possible to add an operation without restarting the container.
- **evaluate** is an endpoint that performs a series of calculations based on a text string:
  - The call http://localhost/evaluate?expression=multiply(2,sum(3,6)) should perform a multiplication and a sum and return **18**.
- **report** is an endpoint that creates a report containing the sum of all calculations performed so far, even if the application is restarted:
  - The call http://localhost/report would return **50** based on the three calls above.

Package the application in a Docker container. Imagine that this is a larger project where the container will run in a production environment. The project should have a structure suitable for collaboration by a development team (i.e., not all logic in one file). There should be test cases written that correspond to what you would expect to put the code into production.

Write in TypeScript.

Good luck!
/The team at vloxq