

**САНКТ-ПЕТЕРБУРГСКИЙ НАЦИОНАЛЬНЫЙ  
ИССЛЕДОВАТЕЛЬСКИЙ УНИВЕРСИТЕТ ИТМО**

**Дисциплина:** Бэк-энд разработка

Отчет

Практическая работа

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## Задание:

- Установка npm (8.1.0), node.js (16.13.0)
- Инициализация npm-пакета
- Установка express
- Удаление express/попытка его обновить
- Написание кастомной команды для npm, чтобы можно удалить express командой "npm run rme"

## Ход работы

### 1. Установка npm и node.js

```
~ / I / ITMO-ICT-Backend-2023 / h / K33412  master
:: Synchronizing package databases...
core is up to date
extra is up to date
community is up to date
multilib is up to date
resolving dependencies...
looking for conflicting packages...

Packages (7) c-ares-1.19.0-1 libuv-1.44.2-1 node-gyp-
```

```
~ / I / ITMO-ICT-Backend-2023 / h / K33412  master  sudo pacman -Sy nodejs
:: Synchronizing package databases...
core is up to date
extra is up to date
community is up to date
multilib is up to date
warning: nodejs-19.6.0-1 is up to date -- reinstalling
resolving dependencies...
looking for conflicting packages...
```

```
~ / I / ITMO-ICT-Backend-2023 / h / K33412  master  npm version
{
  npm: '8.19.2',
  node: '19.6.0',
  v8: '10.8.168.25-node.11',
  uv: '1.44.2',
  zlib: '1.2.13',
  brotli: '1.0.9',
  ares: '1.19.0',
  modules: '111',
  nghttp2: '1.51.0',
  napi: '8',
  llhttp: '8.1.0',
  uvwasi: '0.0.15',
  acorn: '8.8.2',
  simdutf: '3.1.0',
  undici: '5.16.0',
  openssl: '3.0.7',
  cldr: '42.0',
  icu: '72.1',
  tz: '2022e',
  unicode: '15.0'
}
```

## 2. Инициализация npm пакета

```
~/I/ITMO-ICT-Backend-2023/h/K3341/H/HW1 master npm init
3.1.2
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (hw1)
version: (1.0.0)
description:
entry point: (index.js)
test command:
git repository:
keywords:
author:
license: (ISC)
About to write to /home/artem/ITMO/ITMO-ICT-Backend-2023/homeworks/K33412/HW/HW1/package.json:
```

## 3. Установка express

```
~/I/ITMO-ICT-Backend-2023/h/K3341/H/HW1 master ? npm install express
added 57 packages, and audited 58 packages in 3s

7 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
```

## 4. Удаление express

```
~/I/ITMO-ICT-Backend-2023/h/K3341/H/HW1 master ? npm uninstall express
removed 57 packages, and audited 1 package in 522ms

found 0 vulnerabilities
```

## 5. Написание кастомной команды для npm, чтобы можно удалить express командой "npm run rme"

```
GNU nano 7.2
{
  "name": "hw1",
  "version": "1.0.0",
  "description": "",
  "main": "index.js",
  "scripts": {
    "rme": "npm uninstall express",
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "",
  "license": "ISC",
  "dependencies": {
    "express": "^4.18.2"
  }
}
```

```
~/I/ITMO-ICT-Backend-2023/h/K3341/H/HW1 master ? npm run-script rme
> hw1@1.0.0 rme
> npm uninstall express

removed 57 packages, and audited 1 package in 527ms

found 0 vulnerabilities
```

## **Вывод**

В ходе работы были установлен пакетный менеджер npm и nodejs, а также изучены основы работы с ним.