

## How to use the test system?

You will need to have Python 3.4 or higher installed on your system.

Download the appropriate submit.pyc file (under "Sınıf Dosyaları->Submission scripts") from Ninova. You will also need the problem instances of the problems provided for download on the Ninova course website (under "Sınıf Dosyaları->Homework Assignments"). You should place the following in the working directory for each problem: "submit.pyc" and "MANIFEST.txt" files and the "data/" directory.

Run submit.pyc using the command:

```
python submit.pyc instanceID -u username -p password [-b] [--upload]
python submit.pyc -h
```

Note: If there are multiple Python installations on your system, "python" should execute Python 3.4 or a higher version.

instanceID is a number between 1 and 5.

username is your e-mail address.

password will be sent to you by e-mail (from "kabadayi@itu.edu.tr").

-b is the option for building your code.

--upload is the option you will use in your final upload stage, you can ignore it for now

-h is help

The content of a sample manifest file could look like

---

```
[main]

problem = vrp

files =
    solver.c
    REPORT.txt

build =
    gcc solver.c -o solver

run =
    ./solver %f
```

---

This is an example for the content; you should edit this file according to your code file names and problem name. The build part is an example for building C codes; however, if you are using other programming languages, you should replace these lines with appropriate build commands. The build part is optional, however the run part is not. You can leave the "files" part as it is for now. You will use it ONLY during your final upload stage. You may ignore it during the development phase.

You may submit multiple times, and your grade will be the best of all submissions. You can track the status of the submissions and the scoreboard showing all submissions at:

<https://yasemin.cs.itu.edu.tr/discopt>

**IMPORTANT!** Please note that for your final submission to be accepted and graded you have to submit it using the [-upload] option.

### Grading

Infeasible solutions (i.e., those that do not conform to the output format or violate problem constraints) will receive 0 points. Acceptable solutions will receive:

- 0 points for invalid or infeasible solutions
- 6 points for low quality solutions
- 14 points for good quality solutions
- 20 points for high quality solutions

The grading feedback indicates how much your solution must improve to receive a higher grade.

**Note:** For further information regarding how the system works and how a solver program should operate, please see the sample files provided for a sample solver for the knapsack problem.

### IMPORTANT INFORMATION REGARDING ACCESS TO THE SERVER:

If you accessing the server outside the campus, you may need a VPN connection. Please check:

<https://bidb.itu.edu.tr/hizmetler/vpn>