Ülesannete esitamine Codeforcesis

Iga osa kodused ülesanded on Codeforcesis grupis Estonian Competitive Programming võistlusena.

Ülesannete lahendamiseks:

- registreeri end CF kasutajaks (kui sa ei ole veel),
- liitu grupiga "Estonian Competitive Programming",
- registreeri end vastavale võistlusele,
- esita valitud ülesannete lahendused.

Võistlusi näeb otse aadressilt <u>http://codeforces.com/group/jODaK73gf0/contests</u>. Esimese osa kohta on võistlus nimega kt1, teise kohta kt2 jne:

| HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CALENDAR HOME CONTESTS WENGERS STATUS Group Contests IIII Image Start Length Prepared by tooms Name Start Length Prepared by tooms Spectator Kt7 Oct/02/2017 Before start 03:26:00 Register Status Spectator Kt6 Oct/02/2017 Before start 03:26:00 Register Status Spectator Kt6 Oct/02/2017 Before start 03:26:00 Register Status Spectator Kt3 Oct/02/2017 Before start 03:26:00 Prepared by tooms - About Group Kt2 Oct/02/2017 Before start 03:26:00 Prepared by tooms - Member management Kt2 Oct/02/2017 Before start 03:26:00 Drepared by tooms - Member management Kt1 Oct/02/2017 Before start 03:26:00 Drepared by tooms - Member management You are not group member yet, but can request group jon. Kt2 Oct/02/2017 Before start 03:26:00 Content standings Numing 12 months Prepared by tooms Kt5 Oct/02/2017 Before start 03:26:00 Prepared by tooms So Oct/02/2017 Defor | CODEFORCES ^β Sponsored by Telegram | | | | | | | | |
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| | kt5 | <u>00:00</u> | | Before start 03:26:00 | Register » 🤱 x0 | | | | |
| Until Iclosing 12 months | | | | | Until closing 12 months | | | | |

Pilt 1. Grupi Estonian Competitive Programming võistluste leht

Registreerimine ja grupiga liitumine

Kui sul ei ole veel Codeforces'is kasutajat, siis loo kasutaja lingist "Register" (pildil 1 ülal paremal) või mine lehele <u>http://codeforces.com/register</u>

Kui kasutaja olemas, sisene lingist "Enter" (pildil 1 ülal paremal).

Grupiga liitumiseks on (all paremal) sektsioon Member management (pilt 1). Vajuta nuppu "Join".

Võistlusele registreerimine

Vajuta vastava võistluse juures punast linki "Register". Seepeale avaneb järgmine vaade:

| Registration for the contest kt1 | |
|---|---|
| Terms of agreement: | <pre>Gym training is a way to practice, often taking part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode. If you've seen these problems, a virtual contest is not for you - solve these problems in practice. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a gym contest.</pre> |
| Take part: | as individual participant as a team member |
| | Register |

Pilt 2. Võistlusele registreerumine

Jäta valikuks "as individual participant" ning vajuta nuppu "Register".

Võistluse leht

Ülesannete nägemiseks tuleb siseneda võistlusele. Selleks vajuta punast linki "Enter" vastava võistluse juures (pilt 1). Avaneb järgmine vaade:

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

| Problems | | | | | | |
|----------|-------------------|-------------------------------------|-----|--|--|--|
| # | Ν | lame | | | | |
| A | Järelmaks | standard input/output 2 s, 64 MB | 🗐 😭 | | | |
| B | Kell | standard input/output 2 s, 64 MB | 🗐 😭 | | | |
| <u>C</u> | Tigu | standard input/output 2 s, 64 MB | 🕼 😭 | | | |
| D | <u>3D printer</u> | standard input/output 2 s, 64 MB | 🗐 😭 | | | |
| E | Mõttemeister | standard input/output 2 s, 64 MB | 🕼 😭 | | | |
| E | Male | standard input/output 2 s, 64 MB | 🗐 😭 | | | |
| G | Riigihanked | standard input/output 2 s, 64 MB | 🕼 😭 | | | |
| н | Bender | standard input/output 2 s, 64 MB | 🕼 😭 | | | |
| ī | Interpretaator | standard input/output 2 s, 64 MB | 🕼 😭 | | | |
| 1 | Pangatellerid | standard input/output 2 s, 64 MB | 🕼 😭 | | | |

Complete problemset

| | | | | 🥌 <u>Ask a question</u> | | |
|--------------------------|-------|------|----------|-------------------------|--|--|
| Questions about problems | | | | | | |
| # | Party | When | Question | Answer | | |
| No items | | | | | | |

Pilt 3. Võistluse leht

Ülesande järjekorratähe ja nime alt avaneb ülesande tekst:

| PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION | |
|--|---|
| A. Järelmaks | Estonian Competitive Programming |
| time limit per test: 2 seconds | Private |
| memory limit per test: 64 megabytes | Participant |
| input: standard input output: standard output | |
| Ahti ostis uue arvuti, miks maksis $H(100 \le H \le 10000)$ eurot. Ostmisel pakuti talle 0-protsendilise intressiga järelmaksu ja muidugi võttis ta hea pakkumise vastu. Järelmaks kestab N kuud ($1 \le N \le 120$), Iga kuu lõpus peab Ahti tasuma $\frac{1}{52}$ arvuti hinnast. Samas on | → About Group |
| teada, et arvutite hind langeb üsna kiiresti, kaotades igas kuus P protsenti ($1 \le P \le 20$) oma hetkeväärtusest. Seetõttu võib arvuti | Training tasks an competitions for ECP. |
| vaartus mingu perioodii olla madalam kui maksta jaanud jaak. Leida, mitmendaks kuuks on arvuti vaartus kindlasti suurem kui järelmaksujääk. | Group website |
| Input Sisendi ainsal real on 3 täisarvu: H N ia P | <u>kt1</u> |
| | Contest is running |
| Output Väliundisse kiriutada, mitmenda kuu lõpuks ületab aputi väärtus järelmaksuläägi | 12 months |
| Evamples | Contestant |
| input | \$ |
| 1000 10 5 | |
| output | → Submit? |
| 1 | |
| input | Choose Vali fail Pole valitud |
| 1000 20 5 | |
| output | Submit |
| 2 | L |

Pilt 4. Ülesande leht

Ülesande lahenduse esitamine

Ülesande lahenduse esitamiseks vali ülevalt reast "Submit Code" (Pilt 4). Seepeale avaneb esitamise leht:

| PROBLEMS SUBMIT CODE MY SUBMIS | SSIONS STATUS STANDINGS C | USTOM INVOCATION | | |
|--------------------------------|---------------------------|------------------|---|-------------|
| | | Submit solutior | 1 | |
| | | kt1 | | |
| Problem: | A - Järelmaks | Ŧ | | |
| | standard input/output | 2 s, 64 MB | | |
| Language: | GNU GCC 5.1.0 | ¥ | | |
| Source code: | 1 | | | |
| Or choose file: | Vali fail Pole valitud | | | Tab size: 4 |
| | | Submit | | |



Siin tuleb valida ülesanne (ülesande lehelt minnes on see vaikimisi juba valitud) ja kasutatav keel/kompilaator.

Koodi esitamiseks on kaks võimalust: koodi võid sisestada (ka kopeerida) otse koodiaknasse või saad üles laadida oma faili. Faili saab üles laadida ka otse ülesande lehelt sektsioonis "Submit" (Pilt 4, all paremal).

Pärast koodi sisestamist/faili üles laadimist vajuta nuppu "Submit".

Tagasiside

Pärast esitamist asutakse esitatud programmi kohe testima. Avaneb leht "My submissions", kus on näha kõige esimesel real su äsjane lahenduse esitamine ning ka kõik varasemad esitused:

| PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION | | | | | | | | |
|--|-------|----------|---------|----------------------|--------|------------------------|--------|---------|
| My Submissions | | | | | | Þ | | |
| | # | When | Who | Problem | Lang | Verdict | Time | Memory |
| 309 | 15908 | 02:08:22 | katring | <u>A - Järelmaks</u> | Java 8 | Accepted | 139 ms | 3500 KB |
| 309 | 15825 | 02:05:10 | katring | <u>A - Järelmaks</u> | Java 8 | Wrong answer on test 2 | 124 ms | 0 KB |

Pilt 6. Lahenduste esitamised

Kui lahendus oli õige ning läbis kõik testid, on otsuseks (*Verdict*) roheline "Accepted". Ühele ülesandele saab lahendusi esitada korduvalt. Esimeses veerus on esituse number, sellele vajutades näed oma esitatud koodi.