Ontumezaugus - 200 yeullarydbulland gesterbrott, zakwenarenaea e rangrerun runnyeun pezgetzeteg

Bagarul na otorchanue ontun. peus - zagouru on-Tumzonsuu.

Tipuleweenal & typoselle antullization uetogoi hayrun norzhouwe metogos antullization.

Morevatureland magent - 200 morten. and. no-creggeness masserer un serveres.

Matakobka zagares antuluzacien bruaralt al-gestaque stanoi:

- 1) Tetarabultule yaruly naguentarylii ontullizayem cuctelle.
- 2) Buten kamkeetberner yntegned (morke. 3-5).
 3) Onnegemen engrunnetemmen repembrishers.
 4) Toetpoerme megem.

Ontwenzagensmone zogena bunaralet:

- 1) Mr la regal. neper. 2) maglies, oxpernouseure esameoclasse repailement.

Mateneturelkan zageere ontumpelgeer

 $f(x) \rightarrow min(max)$; xee 21

rge +(2) - yerlbeur p-91

U- gonyetunal un-bo, zaegamine organismenudum na ynpokudentie repline unite

) Remierral	1																												+
1) Метады безунивыный оптимизации (чет су 2) Метады услевнай оптимизация (1 парам). 1.1) Однамерной оптимизация (1 парам). 1.2) Миненирией оптимизация (2+ парам). Дих решения задах тапа (1) меномогуютья импения метады; 1) пуштые (410)) 2) первого парядка (4"(x)) — част працув. 3) втераго парядка (4"(x)) — част працув. Ограначения на перемения. Род Нет + еременные ≥0 (метрия) 4(x) — нему дир. что мпениями? стады мот прог- их. Теория дир меничения метады: Метады мот прог- их. Теория дир меничения метады: Метамичения Метамичения Метамичения Метамичения Метамичения Метамичения Програмирования Програмирования Попраминения Попраминения Попраминения Попраминения Попраминения Попраминения Попраминения Попраминения Попраминения	K	w	ce	u	PC	CK	an	zu	Ä		ue	Z	es	qi	26	' C	21/	TU	lelle	uz	roc	Y	u	/	,				
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Lurelitae maganapoborace (111) Troctorabka zagana 117 177-reanpolluleure moit non-ux, uzyrannyel ne-Tyngræke stimmzægenerian noglen:
- yenebaa g-un f(x) (nyngræk ottundubrectu)
- cuctema ognarmy. Mat. magers + 3117 bourant le ceax: 1) manc. mu muy fix) (nputepuis ontunausococtu) 2) cutterey orp. в opopule им. ур-и и неравекств. 3) Tresobornie reoppugationeacti herenerman. Repulse zargaera 177
Chargaphrasia R Коспонической Dayour Odyouse F= \(\subsect C_j \(\mu_j \) = \(\text{if } \) где і – номер ограничения; m – количество ограничений; $\sum_{j=1}^{n} \alpha_{ij} \cdot \alpha_{ij} \leq b_{ij} \cdot i = 1, k$ j – номер переменной; n – количество переменных; x_{j} – размер переменной j; $\begin{cases} u \\ \leq a_{ij} \cdot a_{ij} = b_{i'}, \quad i = k+i, m \end{cases}$ аі - коэффициенты при переменных х; b_i – объемы правых частей ограничений; $(3e) \geq 0 \quad (j=1, 2; 2 \leq n)$ сј – целевой функции F.

Temerus Ontuilles Danyermusie Удови. сист. оуг. Tpes. mouningagun (nonconnagun) Theo. Heathing. Ctorigon Tuber (cumultpureckour) $F = \sum_{i=1}^{n} C_i z_i \rightarrow m\alpha z$ $F = \sum_{j=1}^{n} C_{j} z_{j} \rightarrow m_{i} n$ $\sum_{j=1}^{n} a_{ij} x_{j} \leq b_{i}, i = 1, m$ $\left(\sum_{i=1}^{n}a_{i,i},x_{j},\geq b_{i},i=1,m\right)$ $\langle x_j \geq 0 \ (j=1,n) \rangle$ Bentapholis Bug: $f(x) = (c, x) \rightarrow m\alpha x$ f(20) = (c, 20) -> m/4 $\begin{array}{c|c}
(Ax \leq b) & (Ax \geq b) \\
(2x \geq 0) & (2x \geq 0)
\end{array}$ $2e = (2e_1, 2e_2, \ldots, 2e_n)$ $C = (C_1, C_2, \ldots, C_n)$ Komerweckoug (Ochobrowy) $F = \sum_{i=1}^{n} c_{i} \cdot \mathbf{z}_{i} \rightarrow m\alpha \times / min$ Векториний вид: f(20) = (c, 2e) - max/min $\begin{cases} \sum_{i=1}^{N} a_{i,i}^{\prime} \times y_{i} = b_{i,i} = 1, m \end{cases}$ $\begin{cases}
Ax = b \\
2x \ge 0
\end{cases}$ $\langle x_j \geq 0 \ (j=1,n) \rangle$ Tragulate Tf(n) = c - rumpalmeral $\mathcal{H} = (\mathcal{H}_1, \mathcal{H}_2, \dots, \mathcal{H}_n)$ bospact +(x) $C = (C_1, C_2, \ldots, C_n)$ Auturnaquent - TF(N) = -C - rumpabreral

your. +(x)

Thaleuro mulegerias 317 h novembre com lugy 1) Ecun org. Ibu. Hep-bom, To b rebyto youth Oys. c , ±" -> gadarburler Oys. c , =" -> gadarburler co znakan , +" co znakan , -" Deractus 200 gux ypoilsubairus 2) Eau $\exists x_{i} \neq 0$, to $x_{i} = x_{i} - x_{i}$, $y \in \begin{cases} x_{i} \neq 0 \\ x_{i} \geq 0 \end{cases}$ 3) Eau 6 op. mabour noiet otpuesatenbria, to cregget juliancieto 200 op. 401 (-1). 1) Ean were zagara - zagara na min, a none remember zagary na max, to $F_1 = -F \rightarrow gandle$ penalu zagary na max V 3117 nancres mubecu « Konsamur. Engy.

Thubecta & warrance. Bugy. remen. $(n_1-n_2\geq 1)$ $(n_1\geq 0)$ $F=n_1+2n_2\rightarrow mqx$ $\frac{3}{201+22} = \frac{1}{20} = \frac{1}{20}$ Began 23, 24, 25 ≥0 2°, ≥0, v=1,...,5 (R1-R2-R3=1 \ \mathread \mat Orber 21+22+25-3 -(2) = 22, +222+023+024 +025 -> max

```
Tynney
T=-22, -222+23 >min
1221-23 =6
 R1+R2-232-2
121-22 44
 R160, 2330
Ceegen zagary k noncemuzayun G(x) = - Fix)
 6 = 22, +22, -23 > max
Uzabluca ot respektiveto. U orpuy mas wear
12x1-23+24=6
                                221-23 +24=6
12 + 22 - 203 - 205 = -2
                               - 121 - 22 + 203 + 205 = 2
 12-12 + 26 = 4
                               12-72 + 26 = 4
  R1 = 0, R3-6 ≥0
                                \mathcal{R}_1 \succeq 0, \mathcal{R}_{3-6} \succeq 0, \mathcal{R}_2?
Zamerum 2, 2. rea pagreacts reatpues neplus
21- 24-28; 22-29-210;
                                Ry-10 30
  22x - 228 - 23+ 24-6
  - 24 + 28 - 28 + 210 + 23 + 25 = 2
                                       OTBET
2 y - 28 - 29 + 20 + 26 = 4
6 = 2 2 y - 2 28 + 2 29 - 2 20 - 23 > max
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Tipasus musegemen 3/17 " ctargaptrany sugg. 3) Trepetitie of orp-possericts & republications 4) Uz Laburaca of repeut. The unerouguse oy. Ha Zhak. Timbectu k cravegaptrany bugy Tynunen R1+22+23=120 21-6 ≥0 204 + 205 + 26 = 180 12 + 24 = 40 [=8 21+ 5 22 +6 223 + 423 + 9 25 +726 +min 22 + 265 = 140 23+26 = 90 OCTOLIBRAGE REPEUL. Boyazun repez 2, 2. 20 = 120 - 21 - 29 (2°3 = 120 - 201 - 203 24 = 40 - 20, 24 = 40 - 20,) 25 = 140 - 22 25 = 140 - 22 (26 = 21 + 22 - 30 26 = 90 - 203 xu + 25 + 26 = 180 49 nouve ynpongereux: F = 52, -322 + 2050 > min 1. K. 23-6 20, to: 120 - 21 - 22 20 R1+ R2 6120 W1-2 ≥0 40 - 20 = 0 E 20, 470 2 = 140 140 - 20 ≥ 0 Orbet (201+ 22 = 30 $x_1 + x_2 - 30 \ge 0$ F = 522, -3 22 + 2050 + min

Tipunepee 3117 1) планирование произ-ва им исп-е ресурсов 2) Bagaira o guete (o pasuone) 3) Thousand road zagara 4) Borgara ad ucronozaborrem compar