

Доценту кафедры ИКД

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Лабораторная работа №3

Я, Малков Тихон Александрович, в ходе лабораторной работы №3 осуществлял архивирование текстовых данных в архиваторах arj, gzip, zip, tar, bzip2, lha.

## Листинг

```
#!/bin/bash

str="Малков Тихон ИСТ-232м"

for i in {1..100}; do
    echo "$str" | iconv -f UTF-8 -t CP866 >> cp866.txt
    echo "$str" | iconv -f UTF-8 -t WINDOWS-1251 >> windows-1251.txt
    echo "$str" | iconv -f UTF-8 -t KOI8-R >> koi8.txt
    echo "$str" | iconv -f UTF-8 -t UTF-8 >> utf-8.txt
done

cat cp866.txt windows-1251.txt koi8.txt utf-8.txt > output.txt
# compress each file using different archiving utilities
FILES="cp866.txt windows-1251.txt koi8.txt utf-8.txt output.txt"
for f in $FILES
do
    NAME="{f%.*}"
    arj a -r "$NAME.arj" "$f"
    gzip -c "$f" > "$NAME.gz"
    zip "$NAME.zip" "$f"
    tar -czvf "$NAME.tar.gz" "$f"
    bzip2 -c "$f" > "$NAME.bz2"
    lha a "$NAME.lzh" "$f"
done
echo "Done."
```

## Результат:

mc [foxgen@DESKTOP-J4H5835]:~

Left	File	Command	Options	Right			
<- ~				<- ~			
.n	Name	Size	Modify time	.n	Name	Size	Modify time
koi8.gz		72	Apr 27 15:12	UP--DIR			
koi8.tar.gz		165	Apr 27 15:12	./.	cache	4096	Mar 13 14:53
koi8.txt		2200	Apr 27 15:12	./.	config	4096	Mar 13 14:53
koi8.zip		211	Apr 27 15:12	./.	local	4096	Mar 13 14:53
lab3.sh		714	Apr 27 13:17	./.	lab1	4096	Mar 13 14:58
output.arj		292	Apr 27 15:12	./.	bash_history	943	Mar 13 15:38
output.bz2		276	Apr 27 15:12	./.	bash_logout	220	Mar 13 14:14
output.gz		188	Apr 27 15:12	./.	bashrc	3526	Mar 13 14:14
output.tar.gz		291	Apr 27 15:12	./.	profile	807	Mar 13 14:14
output.txt		10300	Apr 27 15:12	./.	wget-hsts	165	Apr 27 13:35
output.zip		329	Apr 27 15:12	./.	cp866.arj	173	Apr 27 15:12
utf-8.arj		193	Apr 27 15:12	./.	cp866.bz2	99	Apr 27 15:12
utf-8.bz2		105	Apr 27 15:12	./.	cp866.gz	73	Apr 27 15:12
utf-8.gz		95	Apr 27 15:12	./.	cp866.tar.gz	165	Apr 27 15:12
utf-8.tar.gz		182	Apr 27 15:12	./.	cp866.txt	2200	Apr 27 15:12
utf-8.txt		3700	Apr 27 15:12	./.	cp866.zip	213	Apr 27 15:12
utf-8.zip		235	Apr 27 15:12	./.	koi8.arj	169	Apr 27 15:12
windows-1251.arj		186	Apr 27 15:12	./.	koi8.bz2	97	Apr 27 15:12
windows-1251.bz2		99	Apr 27 15:12	./.	koi8.gz	72	Apr 27 15:12
windows-1251.gz		80	Apr 27 15:12	./.	koi8.tar.gz	165	Apr 27 15:12
windows-1251.tar.gz		171	Apr 27 15:12	./.	koi8.txt	2200	Apr 27 15:12
windows-1251.txt		2200	Apr 27 15:12	./.	koi8.zip	211	Apr 27 15:12
windows-1251.zip		227	Apr 27 15:12	./.	lab3.sh	714	Apr 27 13:17
windows-1251.zip				UP--DIR			
953G/1007G (94%)				953G/1007G (94%)			

В результате проделанной работы было установлено что наилучшее сжатие предоставляет архиватор gzip