

## МИНОБРНАУКИ РОССИИ

Федеральное государственное бюджетное образовательное учреждение высшего образования

# «МИРЭА – Российский технологический университет»

## РТУ МИРЭА

## Институт Информационных технологий

Кафедра Математического обеспечения и стандартизации информационных технологий

Практическая работа №2

По дисциплине: «Архитектура операционных систем мобильных устройств»

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#### Задание 1: Вывод информации об устройстве:

#### C:\Users\student.KAF-MOSIT>adb shell getprop

```
[camera.disable_zsl_mode]: [1]
[config.disable bluetooth]: [false]
[dalvik.vm.appimageformat]: [1z4]
[dalvik.vm.dex2oat-Xms]: [64m]
[dalvik.vm.dex2oat-Xmx]: [512m]
[dalvik.vm.dex2oat-minidebuginfo]: [true]
[dalvik.vm.dexopt.secondary]: [true]
[dalvik.vm.heapgrowthlimit]: [256m]
[dalvik.vm.heapmaxfree]: [8m]
[dalvik.vm.heapminfree]: [512k]
[dalvik.vm.heapsize]: [512m]
[dalvik.vm.heapstartsize]: [16m]
[dalvik.vm.heaptargetutilization]: [0.75]
[dalvik.vm.image-dex2oat-Xms]: [64m]
[dalvik.vm.image-dex2oat-Xmx]: [64m]
[dalvik.vm.isa.arm.features]: [default]
[dalvik.vm.isa.arm.variant]: [cortex-a9]
[dalvik.vm.lockprof.threshold]: [500]
[dalvik.vm.stack-trace-dir]: [/data/anr]
[dalvik.vm.usejit]: [true]
[dalvik.vm.usejitprofiles]: [true]
[debug.atrace.tags.enableflags]: [0]
[debug.force rtl]: [0]
[debug.sf.disable_backpressure]: [1]
[debug.sf.latch unsignaled]: [1]
[dev.bootcomplete]: [1]
[dhclient.ipaddress.wlan0]: []
[dhclient.prefixlen.wlan0]: []
[dhclient.wlan0.result]: []
[drm.service.enable]: [true]
[drm.service.enabled]: [1]
[hwservicemanager.ready]: [true]
[init.svc.adbd]: [running]
[init.svc.audioserver]: [running]
[init.svc.bootanim]: [stopped]
[init.svc.cameraserver]: [running]
[init.svc.cmdserver]: [running]
[init.svc.console]: [running]
[init.svc.dhclient wlan0]: [stopped]
[init.svc.drm]: [running]
[init.svc.flash recovery]: [stopped]
[init.svc.gatekeeperd]: [running]
[init.svc.hdcp_tx22]: [stopped]
[init.svc.hdmicecd]: [running]
[init.svc.health-hal-2-0]: [running]
[init.svc.hidl memory]: [running]
[init.svc.hwservicemanager]: [running]
[init.svc.imageserver]: [running]
[init.svc.incidentd]: [running]
[init.svc.installd]: [running]
[init.svc.keystore]: [running]
[init.svc.lmkd]: [running]
[init.svc.logd]: [running]
[init.svc.logd-reinit]: [stopped]
[init.svc.mdnsd]: [running]
[init.svc.media]: [running]
[init.svc.mediadrm]: [running]
[init.svc.mediaextractor]: [running]
[init.svc.mediametrics]: [running]
[init.svc.miracast hdcp2]: [running]
[init.svc.netd]: [running]
[init.svc.neuralnetworks_hal_service_ovx]: [running]
[init.svc.perfprofd]: [running]
[init.svc.preinstall]: [stopped]
[init.svc.rc server]: [running]
[init.svc.remotecfg]: [stopped]
```

```
[init.svc.ril-daemon]: [running]
[init.svc.screen control]: [running]
[init.svc.servicemanager]: [running]
[init.svc.statsd]: [running]
[init.svc.storaged]: [running]
[init.svc.subtitleserver]: [running]
[init.svc.surfaceflinger]: [running]
[init.svc.system control]: [running]
[init.svc.thermalservice]: [running]
[init.svc.tombstoned]: [running]
[init.svc.ueventd]: [running]
[init.svc.usbd]: [stopped]
[init.svc.vendor.audio-hal-2-0]: [running]
[init.svc.vendor.bluetooth-1-0]: [running]
[init.svc.vendor.camera-provider-2-4]: [running]
[init.svc.vendor.cas-hal-1-0]: [running]
[init.svc.vendor.cec-hal-1-0]: [running]
[init.svc.vendor.configstore-hal]: [running]
[init.svc.vendor.drm-clearkey-hal-1-1]: [running]
[init.svc.vendor.drm-widevine-hal-1-1]: [running]
[init.svc.vendor.gatekeeper-1-0]: [running]
[init.svc.vendor.gnss service]: [running]
[init.svc.vendor.gralloc-2-0]: [running]
[init.svc.vendor.hwcomposer-2-2]: [running]
[init.svc.vendor.keymaster-3-0]: [running]
[init.svc.vendor.light-hal-2-0]: [running]
[init.svc.vendor.media.omx]: [running]
[init.svc.vendor.memtrack-hal-1-0]: [running]
[init.svc.vendor.power-hal-1-0]: [running]
[init.svc.vendor.ril-daemon]: [running]
[init.svc.vendor.sensors-hal-1-0]: [running]
[init.svc.vendor.thermal-hal-1-0]: [running]
[init.svc.vendor.usb-hal-1-0]: [running]
[init.svc.vendor.wifi_hal_legacy]: [running]
[init.svc.vndservicemanager]: [running]
[init.svc.vold]: [running]
[init.svc.wificond]: [running]
[init.svc.wpa supplicant]: [running]
[init.svc.zygote]: [running]
[log.tag.WifiHAL]: [D]
[log.tag.stats log]: [I]
[logd.logpersistd.enable]: [true]
[media.amnuplayer.audio.delayus]: [-40000]
[media.metadataretriver.disable-8k]: [true]
[media.omx.display mode]: [1]
[media.support.dolbyvision]: [true]
[net.bt.name]: [Android]
[net.qtaguid enabled]: [1]
[net.tcp.default_init_rwnd]: [60]
[net.tethering.noprovisioning]: [true]
[persist.audio.debug.read]: []
[persist.audio.debug.search]: []
[persist.logd.logpersistd]: []
[persist.netd.stable_secret]: [5e8d:f4d9:fb68:34c:5135:edaa:a023:e2f4]
[persist.service.bdroid.bdaddr]: [22:22:04:9f:c8:04]
[persist.sys.app.rotation]: [middle port]
[persist.sys.bootvideo]: [50]
[persist.sys.dalvik.vm.lib.2]: [libart.so]
[persist.sys.hdmi.addr.playback]: [4]
[persist.sys.hdmi.keep_awake]: [false]
[persist.sys.logo.led.trigger]: [1]
[persist.sys.logoled.brightness]: [1]
[persist.sys.rotation]: [0]
[persist.sys.timezone]: [GMT]
[persist.sys.usb.config]: [adb]
[persist.sys.webview.vmsize]: [104857600]
[persist.vendor.media.bootvideo]: [0050]
[persist.vendor.sys.cec.autowakeup]: [true]
[persist.vendor.sys.cec.deviceautopoweroff]: [false]
[persist.vendor.sys.cec.set menu language]: [false]
[pm.dexopt.ab-ota]: [speed-profile]
[pm.dexopt.bg-dexopt]: [speed-profile]
[pm.dexopt.boot]: [verify]
[pm.dexopt.first-boot]: [quicken]
```

```
[pm.dexopt.inactive]: [verify]
[pm.dexopt.install]: [speed-profile]
[pm.dexopt.priv-apps-oob]: [false]
[pm.dexopt.priv-apps-oob-list]: [ALL]
[pm.dexopt.shared]: [speed]
[ro.actionable compatible property.enabled]: [true]
[ro.addon.arch]: [arm]
[ro.addon.open type]: [mini]
[ro.addon.open version]: [20300522]
[ro.addon.platform]: [9.0]
[ro.addon.sdk]: [28]
[ro.addon.type]: [gapps]
[ro.af.client_heap_size_kbyte]: [1536]
[ro.allow.mock.location]: [0]
[ro.art.hiddenapi.warning]: [1]
[ro.audio.mapvalue]: [0,0,0,0]
[ro.baseband]: [unknown]
[ro.bionic.ld.warning]: [1]
[ro.board.platform]: [u202]
[ro.boot.bootloader]: []
[ro.boot.bootreason]: [reboot]
[ro.boot.build.expect.baseband]: [N/A]
[ro.boot.dtbo idx]: [0]
[ro.boot.firstboot]: [0]
[ro.boot.hardware]: [amlogic]
[ro.boot.mac]: [c8:63:14:72:52:bf]
[ro.boot.selinux]: [permissive]
[ro.boot.serialno]: [c863147252bf]
[ro.bootimage.build.date]: [Thu Jul 20 15:31:29 CST 2023]
[ro.bootimage.build.date.utc]: [1689838289]
[ro.bootimage.build.fingerprint]:
[Khadas/kvim31/kvim31:9/PPR1.180610.011/20230720:userdebug/test-keys]
[ro.bootloader]: [unknown]
[ro.bootmode]: [unknown]
[ro.boottime.adbd]: [9801626170]
[ro.boottime.audioserver]: [9287041044]
[ro.boottime.bootanim]: [11111189712]
[ro.boottime.cameraserver]: [9818087461]
[ro.boottime.cmdserver]: [30538933096]
[ro.boottime.console]: [9796965795]
[ro.boottime.drm]: [9819781920]
[ro.boottime.flash recovery]: [9803395211]
[ro.boottime.gatekeeperd]: [9943175628]
[ro.boottime.hdmicecd]: [8973139711]
[ro.boottime.health-hal-2-0]: [9093509878]
[ro.boottime.hidl memory]: [8999674211]
[ro.boottime.hwservicemanager]: [8725464753]
[ro.boottime.imageserver]: [7534935669]
[ro.boottime.incidentd]: [9834422461]
[ro.boottime.init]: [6401]
[ro.boottime.init.cold_boot_wait]: [181]
[ro.boottime.init.mount all.default]: [869]
[ro.boottime.init.selinux]: [190]
[ro.boottime.installd]: [9844575753]
[ro.boottime.keystore]: [9853458253]
[ro.boottime.lmkd]: [9307794253]
[ro.boottime.logd]: [8721981003]
[ro.boottime.logd-reinit]: [8954849086]
[ro.boottime.mdnsd]: [10033654420]
[ro.boottime.media]: [9886019170]
[ro.boottime.mediadrm]: [9855329461]
[ro.boottime.mediaextractor]: [9875155003]
[ro.boottime.mediametrics]: [9884275711]
[ro.boottime.miracast hdcp2]: [7537901335]
[ro.boottime.netd]: [8948150711]
[ro.boottime.neuralnetworks_hal_service_ovx]: [9186224753]
[ro.boottime.perfprofd]: [9957080045]
[ro.boottime.preinstall]: [30536598888]
[ro.boottime.rc server]: [8975807586]
[ro.boottime.remotecfg]: [9816147503]
[ro.boottime.ril-daemon]: [9809130670]
[ro.boottime.screen_control]: [30877901096]
[ro.boottime.servicemanager]: [8723690044]
[ro.boottime.statsd]: [9887732295]
```

```
[ro.boottime.storaged]: [9893295586]
[ro.boottime.subtitleserver]: [8978686919]
[ro.boottime.surfaceflinger]: [9322002170]
[ro.boottime.system control]: [8981681544]
[ro.boottime.thermalservice]: [9323706378]
[ro.boottime.tombstoned]: [9958802795]
[ro.boottime.ueventd]: [6915277210]
[ro.boottime.usbd]: [9980878420]
[ro.boottime.vendor.audio-hal-2-0]: [9002935336]
[ro.boottime.vendor.bluetooth-1-0]: [9007142544]
[ro.boottime.vendor.camera-provider-2-4]: [9012564586]
[ro.boottime.vendor.cas-hal-1-0]: [9016879211]
[ro.boottime.vendor.cec-hal-1-0]: [9250633878]
[ro.boottime.vendor.configstore-hal]: [9020540336]
[ro.boottime.vendor.drm-clearkey-hal-1-1]: [9024795544]
[ro.boottime.vendor.drm-widevine-hal-1-1]: [9039113044]
[ro.boottime.vendor.gatekeeper-1-0]: [9050366211]
[ro.boottime.vendor.gnss service]: [9062970961]
[ro.boottime.vendor.gralloc-2-0]: [9077130253]
[ro.boottime.vendor.hwcomposer-2-2]: [9085665836]
[ro.boottime.vendor.keymaster-3-0]: [8760567753]
[ro.boottime.vendor.light-hal-2-0]: [9109165628]
[ro.boottime.vendor.media.omx]: [9925293545]
[ro.boottime.vendor.memtrack-hal-1-0]: [9180835128]
[ro.boottime.vendor.power-hal-1-0]: [9198020544]
[ro.boottime.vendor.ril-daemon]: [9940512045]
[ro.boottime.vendor.sensors-hal-1-0]: [9219079753]
[ro.boottime.vendor.thermal-hal-1-0]: [9237470878]
[ro.boottime.vendor.usb-hal-1-0]: [9257862878]
[ro.boottime.vendor.wifi_hal_legacy]: [9267738503]
[ro.boottime.vndservicemanager]: [8727713003]
[ro.boottime.vold]: [8763390044]
[ro.boottime.wificond]: [9909591878]
[ro.boottime.wpa_supplicant]: [19179454424]
[ro.boottime.zygote]: [8949813753]
[ro.build.characteristics]: [mbx, nosdcard]
[ro.build.date]: [Thu Jul 20 15:31:29 CST 2023]
[ro.build.date.utc]: [1689838289]
[ro.build.description]: [kvim31-userdebug 9 PPR1.180610.011 20230720 test-keys]
[ro.build.display.id]: [VIM3L Pie V230720]
[ro.build.expect.bootloader]: [01.01.180822.145544]
[ro.build.fingerprint]: [OnePlus/OnePlus6/OnePlus6:8.1.0/OPM1.171019.011/06140300:user/release-
keys]
[ro.build.flavor]: [kvim31-userdebug]
[ro.build.host]: [server]
[ro.build.id]: [PPR1.180610.011]
[ro.build.product]: [kvim31]
[ro.build.system root image]: [true]
[ro.build.tags]: [test-keys]
[ro.build.type]: [userdebug]
[ro.build.user]: [xiong]
[ro.build.version.all codenames]: [REL]
[ro.build.version.base_os]: []
[ro.build.version.codename]: [REL]
[ro.build.version.incremental]: [20230720]
[ro.build.version.min supported target sdk]: [17]
[ro.build.version.preview_sdk]: [0]
[ro.build.version.release]: [9]
[ro.build.version.sdk]: [28]
[ro.build.version.security_patch]: [2018-08-05]
[ro.carrier]: [unknown]
[ro.config.alarm alert]: [Alarm Classic.ogg]
[ro.config.low ram]: [true]
[ro.config.notification sound]: [pixiedust.ogg]
[ro.config.ringtone]: [Ring Synth 04.ogg]
[ro.crypto.fuse_sdcard]: [true]
[ro.crypto.state]: [unencrypted]
[ro.crypto.volume.filenames_mode]: [aes-256-cts]
[ro.dalvik.vm.native.bridge]: [0]
[ro.debuggable]: [1]
[ro.device owner]: [false]
[ro.hardware]: [amlogic]
[ro.hdmi.device type]: [4]
```

```
[ro.hdmi.set menu language]: [true]
[ro.logd.size.stats]: [64K]
[ro.media.camera_preview.limitedrate]: [1920x1080x30,1280x720x30,640x480x30,320x240x28]
[ro.media.camera_preview.maxsize]: [1920x1080]
[ro.media.camera preview.usemjpeg]: [1]
[ro.media.camera usb.faceback]: [false]
[ro.media.maxmem]: [629145600]
[ro.net.pppoe]: [true]
[ro.opengles.version]: [196610]
[ro.persistent properties.ready]: [true]
[ro.platform.support.dolbyvision]: [true]
[ro.product.board]: [kvim31]
[ro.product.brand]: [Khadas]
[ro.product.build.date]: [Thu Jul 20 15:31:29 CST 2023]
[ro.product.build.date.utc]: [1689838289]
[ro.product.build.fingerprint]: [Khadas/kvim31/kvim31:9/PPR1.180610.011/20230720:userdebug/test-
[ro.product.cpu.abi]: [armeabi-v7a]
[ro.product.cpu.abi2]: [armeabi]
[ro.product.cpu.abilist]: [armeabi-v7a,armeabi]
[ro.product.cpu.abilist32]: [armeabi-v7a,armeabi]
[ro.product.cpu.abilist64]: []
[ro.product.device]: [kvim31]
[ro.product.firmware]: [00904011]
[ro.product.first api level]: [28]
[ro.product.locale]: [en-US]
[ro.product.manufacturer]: [Khadas]
[ro.product.model]: [VIM3L]
[ro.product.name]: [kvim31]
[ro.product.otaupdateurl]: [http://android.khadas.com:8082/otaupdate/update]
[ro.product.vendor.brand]: [Khadas]
[ro.product.vendor.device]: [kvim31]
[ro.product.vendor.manufacturer]: [Khadas]
[ro.product.vendor.model]: [VIM3L]
[ro.product.vendor.name]: [kvim31]
[ro.property service.version]: [2]
[ro.radio.noril]: [false]
[ro.revision]: [0]
[ro.runtime.firstboot]: [1293883248608]
[ro.secure]: [1]
[ro.serialno]: [c863147252bf]
[ro.sf.disable triple buffer]: [1]
[ro.sf.lcd density]: [280]
[ro.treble.enabled]: [true]
[ro.vendor.app.optimization]: [true]
[ro.vendor.autoconnectbt.btclass]: [50c]
[ro.vendor.autoconnectbt.isneed]: [false]
[ro.vendor.autoconnectbt.macprefix]: [00:CD:FF]
[ro.vendor.autoconnectbt.nameprefix]: [Amlogic_RC]
[ro.vendor.autoconnectbt.rssilimit]: [70]
[ro.vendor.build.date]: [Thu Jul 20 15:31:29 CST 2023]
[ro.vendor.build.date.utc]: [1689838289]
[ro.vendor.build.fingerprint]: [Khadas/kvim31/kvim31:9/PPR1.180610.011/20230720:userdebug/test-
[ro.vendor.build.security_patch]: []
[ro.vendor.camera usb.faceback]: [true]
[ro.vendor.platform.board camera]: [true]
[ro.vendor.platform.disable.audiorawout]: [false]
[ro.vendor.platform.has.mbxuimode]: [true]
[ro.vendor.platform.has.realoutputmode]: [true]
[ro.vendor.platform.hdmi.device_type]: [4]
[ro.vendor.platform.is.tv]: [0]
[ro.vendor.platform.need.display.hdmicec]: [true]
[ro.vendor.platform.omx]: [true]
[ro.vendor.platform.support.dolby]: [true]
[ro.vendor.platform.support.dolbyvision]: [true]
[ro.vendor.platform.support.dts]: [true]
[ro.vendor.platform.usehwh264]: [true]
[ro.vendor.platform.usehwmjpeg]: [true]
[ro.vendor.product.cpu.abilist]: [armeabi-v7a,armeabi]
[ro.vendor.product.cpu.abilist32]: [armeabi-v7a,armeabi]
[ro.vendor.product.cpu.abilist64]: []
[ro.vendor.sdr2hdr.enable]: [true]
[ro.vendor.vndk.version]: [26.1.0]
```

```
[ro.vndk.version]: [28]
[ro.wifi.channels]: []
[ro.zygote]: [zygote32]
[security.perf harden]: [1]
[selinux.restorecon_recursive]: [/data/misc_ce/0]
[service.adb.tcp.port]: [5555]
[service.bootanim.exit]: [1]
[service.bootvideo]: [0]
[service.bootvideo.exit]: [0]
[service.sf.present timestamp]: [1]
[sys.boot.reason]: [reboot]
[sys.boot completed]: [1]
[sys.extboard.exist]: [0]
[sys.lcd.exist]: [0]
[sys.logbootcomplete]: [1]
[sys.retaildemo.enabled]: [0]
[sys.sysctl.extra free kbytes]: [24300]
[sys.usb.config]: [adb]
[sys.usb.configfs]: [1]
[sys.usb.controller]: [ff400000.dwc2_a]
[sys.usb.ffs.ready]: [1]
[sys.usb.state]: [adb]
[sys.user.0.ce available]: [true]
[sys.wifitracing.started]: [1]
[tombstoned.max tombstone count]: [50]
[vendor.afbcd.enable]: [1]
[vendor.display-size]: [720x576]
[vendor.sys.hwc.booted]: [true]
[vendor.system.support.dolbyvision]: [false]
[vold.has_adoptable]: [1]
[vold.has quota]: [1]
[vold.has_reserved]: [1]
[vold.post fs data done]: [1]
[wifi.direct.interface]: [p2p-dev-wlan0]
[wifi.interface]: [wlan0]
[wlan.driver.status]: [ok]
```

#### Задание 2: Вывод логов:

#### C:\Users\student.KAF-MOSIT>adb logcat

```
----- beginning of system
01-01 12:00:07.228 3325 3325 I vold
01-01 12:00:07.230 3325 3325 V vold
01-01 12:00:07.236 3325 3325 W vold
                                                     : Vold 3.0 (the awakening) firing up
                                                      : Detected support for: ext4 vfat ntfs exfat iso9660
                                                      : Failed to LOOP GET STATUS64 /dev/block/loop0: No such
device or address
01-01 12:00:07.236 3325 3325 W vold
                                                    : Failed to LOOP GET STATUS64 /dev/block/loop3: No such
device or address
01-01 12:00:07.236 3325 3325 W vold
                                                      : Failed to LOOP GET STATUS64 /dev/block/loop2: No such
device or address
01-01 12:00:07.236 3325 3325 W vold : Failed to LOOP GET STATUS64 /dev/block/loop5: No such
device or address
01-01 12:00:07.236 3325 3325 W vold : Failed to LOOP GET STATUS64 /dev/block/loop7: No such
device or address
01-01 12:00:07.236 3325 3325 W vold
                                                      : Failed to LOOP GET STATUS64 /dev/block/loop4: No such
device or address
01-01 12:00:07.236 3325 3325 W vold
                                                    : Failed to LOOP GET STATUS64 /dev/block/loop6: No such
device or address
01-01 12:00:07.236 3325 3325 W vold
                                                    : Failed to LOOP GET STATUS64 /dev/block/loop1: No such
device or address
01-01 12:00:07.241 3325 3325 D vold
                                                   : VoldNativeService::start() completed OK
01-01 12:00:07.247 3325 3336 D vold
01-01 12:00:07.247 3325 3336 D vold
                                                   : e4crypt_init_user0
                                                      : e4crypt prepare user storage for volume null, user 0,
serial 0, flags 1
01-01 12:00:07.247 3325 3336 D vold
                                                      : Preparing: /data/system/users/0
01-01 12:00:07.248 3325 3336 D vold
01-01 12:00:07.248 3325 3336 D vold
01-01 12:00:07.248 3325 3336 D vold
                                                    : Preparing: /data/misc/profiles/cur/0
                                                      : Preparing: /data/system de/0
                                                      : Preparing: /data/misc de/0
01-01 12:00:07.249 3325 3336 D vold
                                                     : Preparing: /data/vendor de/0
01-01 12:00:07.249 3325 3336 D vold
01-01 12:00:07.250 3325 3336 V vold
01-01 12:00:07.250 3325 3336 V vold
                                                    : Preparing: /data/user_de/0
                                                      : /system/bin/vold prepare subdirs
                                                             prepare
01-01 12:00:07.250 3325 3336 V vold
01-01 12:00:07.250 3325 3336 V vold
01-01 12:00:07.250 3325 3336 V vold
                                                              0
                                                      :
                                                              1
01-01 12:00:07.285 3325 3336 D vold
                                                      : e4crypt unlock user key 0 serial=0 token present=0
01-01 12:00:08.029 3426 3426 I android.hardware.wifi@1.0-service: Wifi Hal is booting up...
01-01 12:00:08.525 3491 3491 I installd: installd firing up 01-01 12:00:08.715 3504 3504 I wificond: wificond is starting up...
01-01 12:00:09.328 3394 3394 D Zygote32Timing: BeginIcuCachePinning took to complete: 67ms
01-01 12:00:09.452 3503 3587 W storaged: health: invalid battery status 01-01 12:00:10.580 3394 3394 D Zygote32Timing: PreloadClasses took to complete: 1252ms 01-01 12:00:10.866 3394 3394 D Zygote32Timing: PreloadResources took to complete: 286ms
01-01 12:00:10.971 3394 3394 D Zygote32Timing: ZygotePreload took to complete: 1710ms
01-01 12:00:11.056 3394 3394 D Zygote32Timing: PostZygoteInitGC took to complete: 85ms 01-01 12:00:11.056 3394 3394 D Zygote32Timing: ZygoteInit took to complete: 1797ms 01-01 12:00:11.284 3641 I chatty : uid=1000 system_server expire 175 lines
01-01 12:00:11.538 3641 3655 I chatty : uid=1000 system server expire 13 lines
01-01 12:00:11.630 3641 3661 I chatty : uid=1000(system) batterystats-wo expire 6 lines 01-01 12:00:12.533 3641 3665 I chatty : uid=1000(system) android.display expire 5 lines 01-01 12:00:12.533 3641 3693 I chatty : uid=1000 system_server expire 2 lines
01-01 12:00:12.733 3641 3641 I chatty : uid=1000 system_server expire 67 lines
01-01 12:00:12.755 3641 3699 I chatty : uid=1000 system_server expire 3 lines 01-01 12:00:12.756 3641 3700 I chatty : uid=1000 system_server expire 5 lines
01-01 12:00:12.790 3503 3587 I storaged: storaged: Start
01-01 12:00:12.790 3503 3587 E storaged: getDiskStats failed with result NOT SUPPORTED and size
01-01 12:00:12.823 3641 3655 I chatty : uid=1000 system_server expire 5 lines
01-01 12:00:12.959 3641 3665 I chatty : uid=1000(system) android.display expire 1 line
01-01 12:00:13.077 3641 3641 I chatty : uid=1000 system_server expire 64 lines 01-01 12:00:13.080 3641 3699 I chatty : uid=1000 system_server expire 2 lines 01-01 12:00:13.191 3641 3693 I chatty : uid=1000 system_server expire 3 lines
01-01 12:00:13.234 3641 3715 I chatty : uid=1000(system) NetworkWatchlis expire 2 lines
01-01 12:00:13.287 3641 3716 I chatty : uid=1000(system) StorageManagerS expire 3 lines 01-01 12:00:13.288 3325 3336 E vold : Failed to read field SystemLocale: Success 01-01 12:00:13.293 3641 3700 I chatty : uid=1000 system_server expire 4 lines
01-01 12:00:13.340 3641 3641 I chatty : uid=1000 system server expire 72 lines
```

#### Задание 3: Вывод информации о сети:

```
C:\Users\student.KAF-MOSIT>adb shell ifconfig
         Link encap: Ethernet HWaddr 10:2c:6b:cb:d5:5f Driver bcmsdh sdmmc
         UP BROADCAST MULTICAST MTU:1500 Metric:1
         RX packets:0 errors:0 dropped:0 overruns:0 frame:0
         TX packets:3 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:1000
         RX bytes:0 TX bytes:298
        Link encap: Ethernet HWaddr c8:63:14:72:52:bf Driver meson6-dwmac
eth0
         UP BROADCAST MULTICAST MTU:1500 Metric:1
         RX packets:0 errors:0 dropped:0 overruns:0 frame:0
         TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:1000
         RX bytes:0 TX bytes:0
         Interrupt:28
10
         Link encap:Local Loopback
         inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope: Host
         UP LOOPBACK RUNNING MTU:65536 Metric:1
         RX packets:122 errors:0 dropped:0 overruns:0 frame:0
         TX packets:122 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:1
         RX bytes:21743 TX bytes:21743
```

### Задание 4: Вывод текущих настроек устройства:

## C:\Users\student.KAF-MOSIT>adb shell settings list system

```
accelerometer rotation=0
alarm alert=content://media/internal/audio/media/13
alarm alert set=1
dim screen=1
dtmf tone=1
dtmf tone type=0
haptic feedback enabled=1
hearing aid=0
hide_rotation_lock_toggle_for_accessibility=0
lockscreen_sounds_enabled=1
mode_ringer_streams affected=166
mute_streams_affected=47
notification light pulse=1
notification sound=content://media/internal/audio/media/180
notification sound set=1
pointer speed=0
ringtone=content://media/internal/audio/media/39
ringtone set=1
screen brightness=102
screen brightness for vr=86
screen brightness mode=0
screen off timeout=-1
sound effects enabled=1
tty mode=0
user rotation=0
vibrate when ringing=0
volume alarm=6
volume bluetooth sco=7
volume music=5
volume music usb headset=3
volume notification=5
volume ring=5
volume_system=7
volume_voice=4
```

## Задание 5: Получение списка установленных приложений:

C:\Users\student.KAF-MOSIT>adb shell pm -1

```
package:com.google.android.carriersetup
package:com.droidlogic.inputmethod.remote
package:com.android.cts.priv.ctsshim
package:com.google.android.ext.services
package:com.android.providers.telephony
package:com.android.providers.calendar
package:com.android.tv.settings
package:com.android.providers.media
package:com.google.android.onetimeinitializer
package:com.google.android.ext.shared
package:com.android.wallpapercropper
package:com.android.documentsui
package:com.android.externalstorage
package:com.android.htmlviewer
package:com.android.companiondevicemanager
package:com.android.providers.downloads
package:com.droidlogic.mediacenter
package:com.google.android.soundpicker
package:com.droidlogic
package:com.droidlogic.tv.settings
package:com.google.android.configupdater
package:com.android.defcontainer
package:com.android.vending
package:com.android.pacprocessor
package:com.android.certinstaller
package:cm.aptoidetv.pt
package:android
package:com.android.camera2
package:com.android.launcher3
package:com.android.backupconfirm
package:cn.com.factorytest
package:com.droidlogic.FileBrower
package:com.google.android.deskclock
package:com.android.statementservice
package:com.android.providers.settings
package:com.android.sharedstoragebackup
package:com.android.dreams.basic
package:com.android.webview
package:com.android.se
package:com.android.inputdevices
package:com.google.android.apps.wellbeing
package:com.khadas.logoledcontrol
package:com.droidlogic.BluetoothRemote
package:com.android.musicfx
package:com.droidlogic.SubTitleService
package:com.google.android.markup
package:com.google.android.syncadapters.contacts
package:com.android.keychain
package:com.google.android.gm.exchange
package:com.google.android.calculator
package:com.android.chrome
package:com.android.gallery3d
package:com.google.android.gms
package:com.google.android.gsf
package:com.google.android.tts
package:com.droidlogic.videoplayer
package:com.google.android.partnersetup
package:com.khadas.schpwronoff
package:com.android.packageinstaller
package:com.android.proxyhandler
package:com.android.inputmethod.latin
package:com.google.android.feedback
package:com.google.android.calendar
package:com.google.android.syncadapters.calendar
package:com.android.managedprovisioning
package:com.android.dreams.phototable
```

```
package:com.droidlogic.miracast
package:com.android.smspush
package:com.android.wallpaper.livepicker
package:com.google.android.backuptransport
package:com.android.cts.ctsshim
package:com.droidlogic.imageplayer
package:com.android.vpndialogs
package:com.android.music
package:com.android.phone
package:com.android.shell
package:com.android.wallpaperbackup
package:com.android.providers.userdictionary
package:com.android.location.fused
package:com.android.systemui
package:com.droidlogic.appinstall
package:com.google.android.gms.setup
package:com.android.bluetooth
package:com.android.providers.contacts
package:com.android.captiveportallogin
package:com.droidlogic.otaupgrade
package:com.google.android.apps.restore
```

#### Задание 6: Установка приложения Я.Музыка:

C:\Users\student.KAF-MOSIT>adb install -r C:\Users\student.KAF-MOSIT\Downloads\ru.yandex.music\_2023.09.2\_10gpr-24023471\_minAPI24(arm64-v8a,armeabi-v7a,x86,x86\_64) (nodpi)\_apkmirror.com.apk
Performing Streamed Install
Success

## Задание 7: Удаление приложения Я.Музыка:

C:\Users\student.KAF-MOSIT>adb shell pmuninstall ru.yandex.music Success