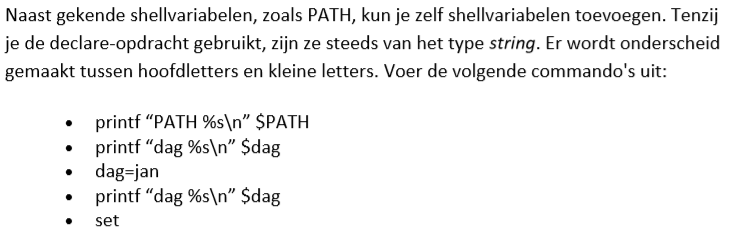
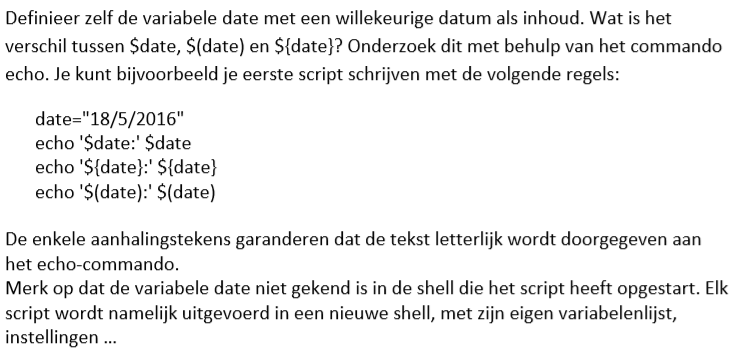
**Besturingssystemen II labo**

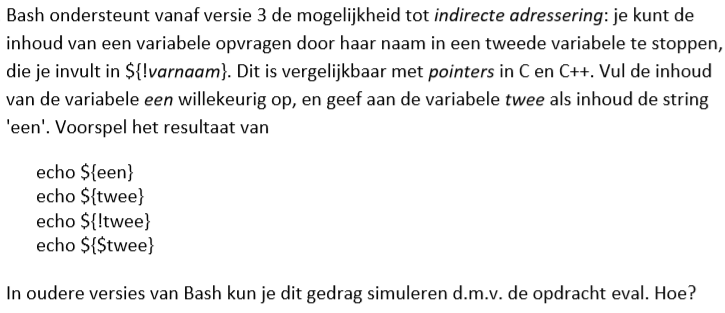
Oef 55

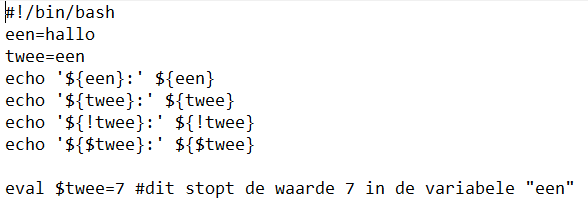


Oef 56

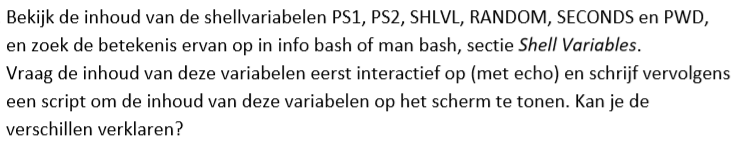


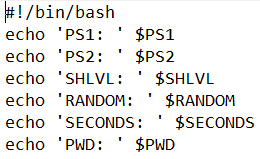
Oef 57





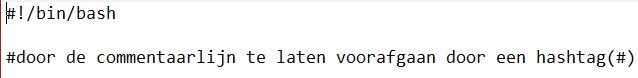
Oef 58



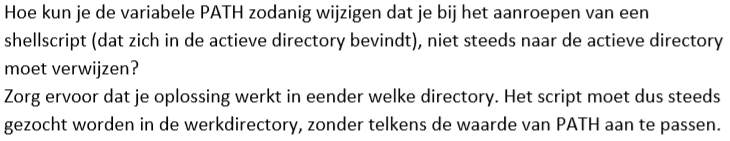


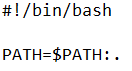
Oef 59



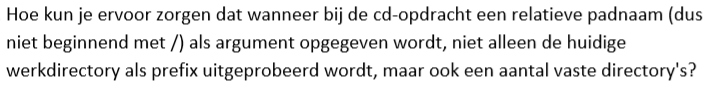


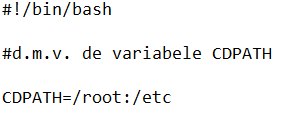
Oef 60





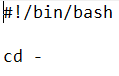
Oef 61



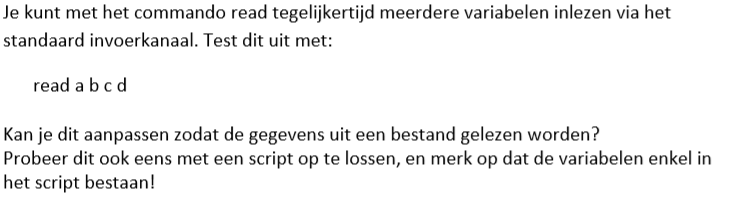


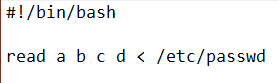
Oef 62



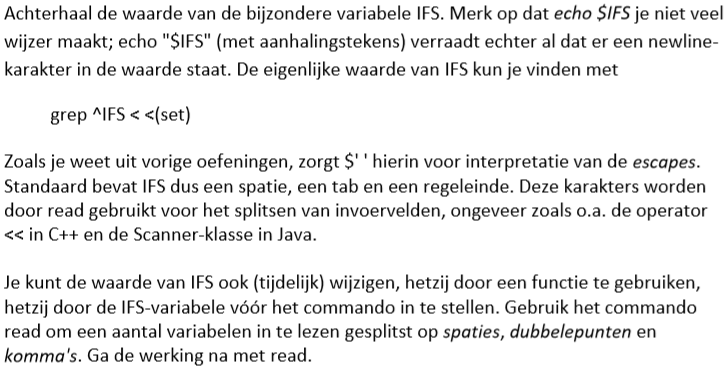


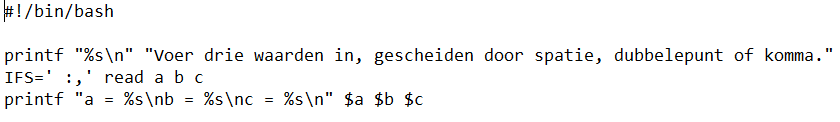
Oef 63



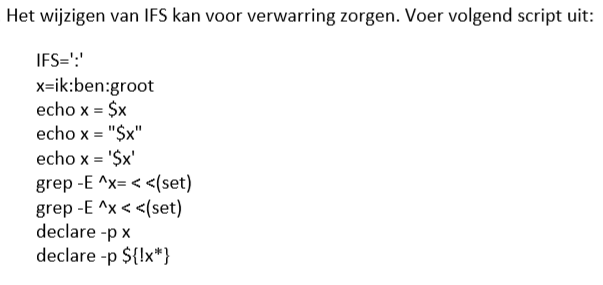


Oef 64

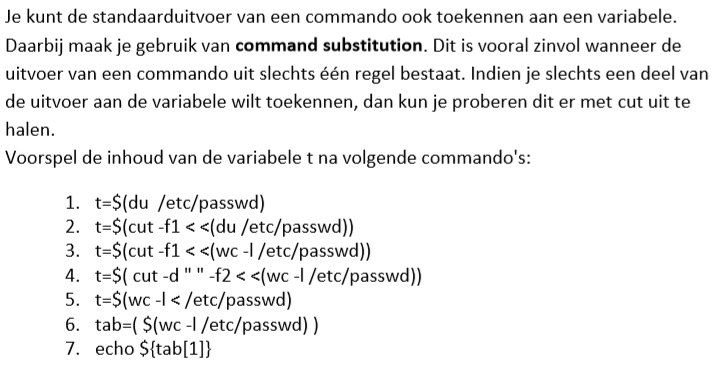




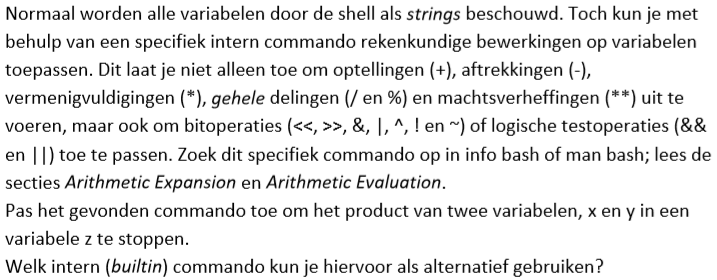
Oef 65

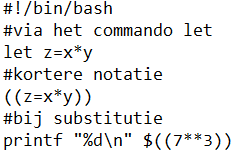


Oef 66

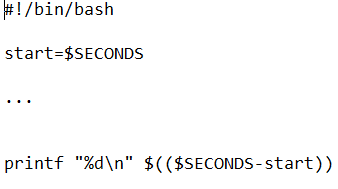
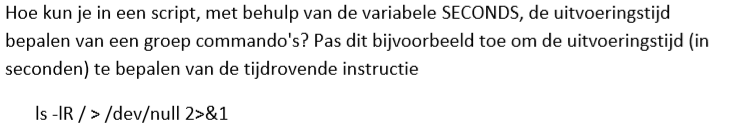


Oef 67



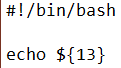


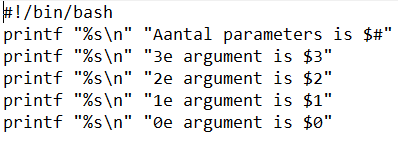
Oef 68



Oef 69

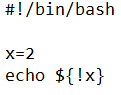






Oef 70

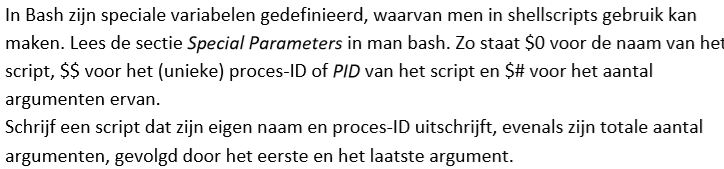


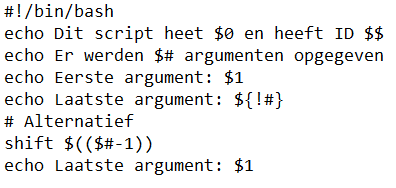


Oef 71

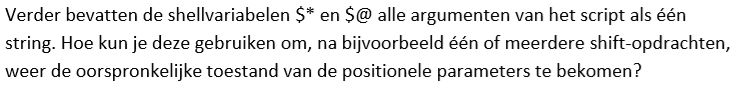


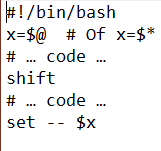
Oef 72



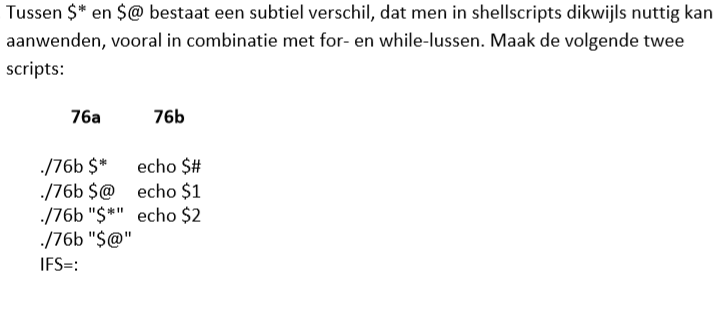


Oef 73



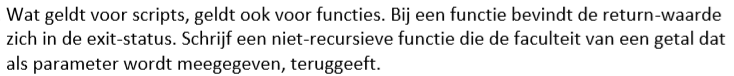


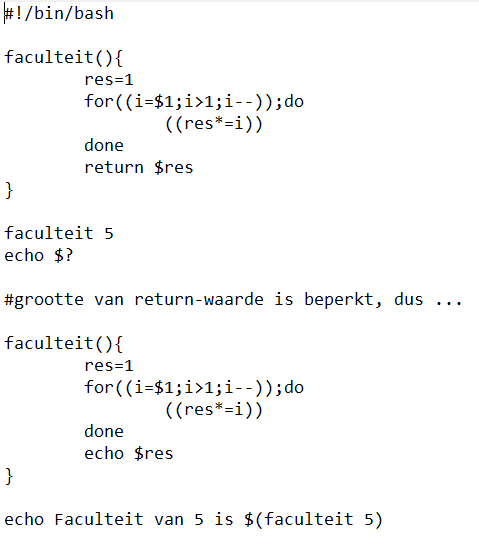
Oef 74





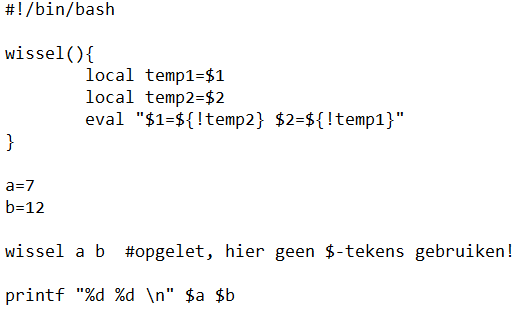
Oef 75



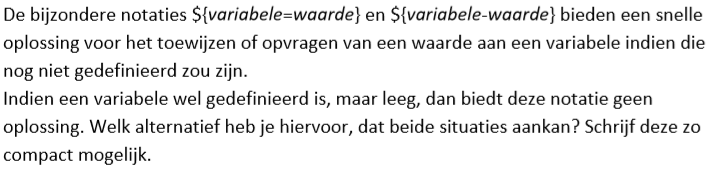


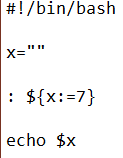
Oef 76



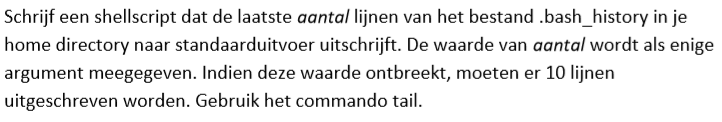


Oef 77

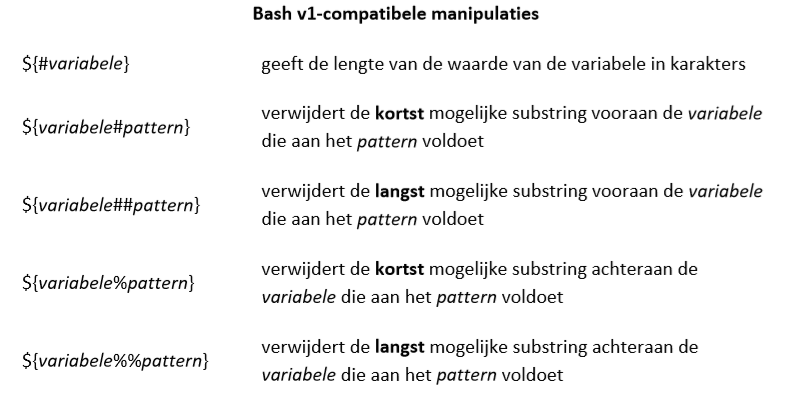


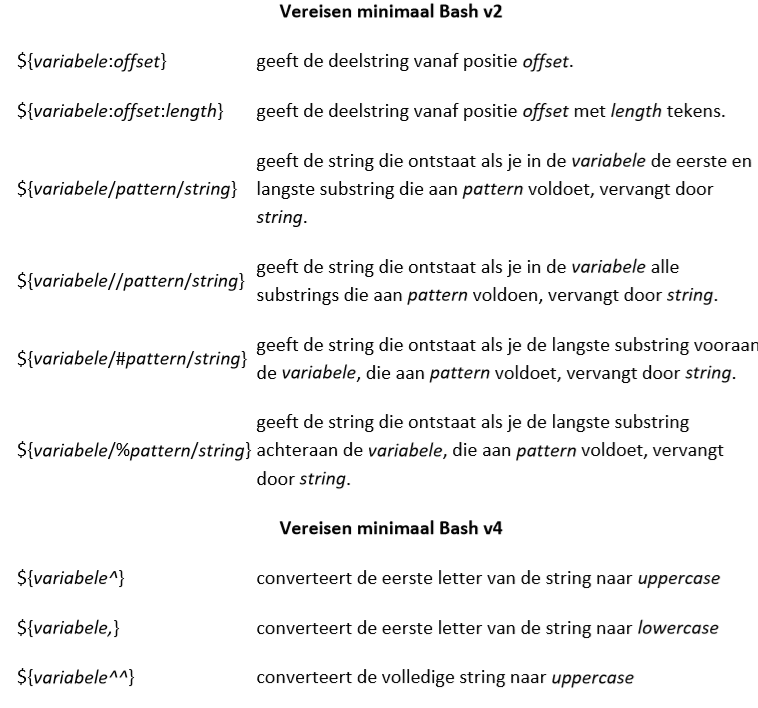


Oef 78

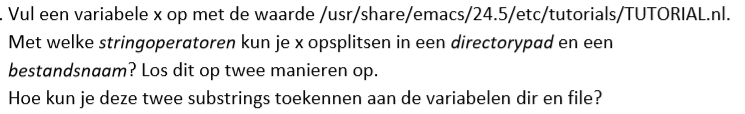


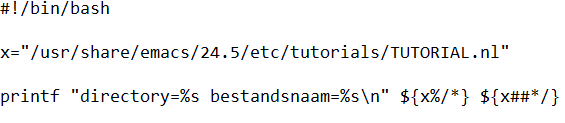




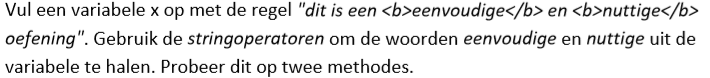


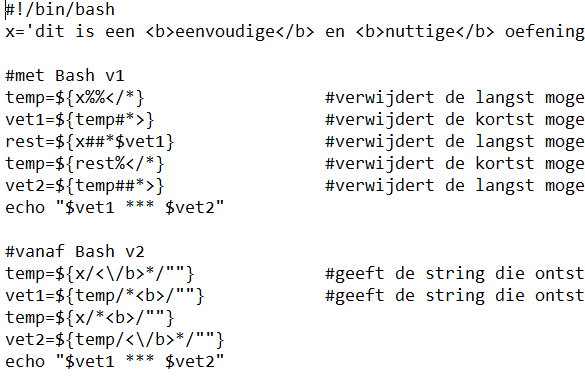
Oef 79



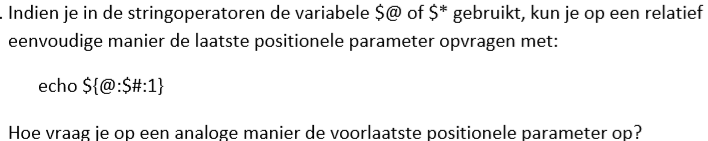


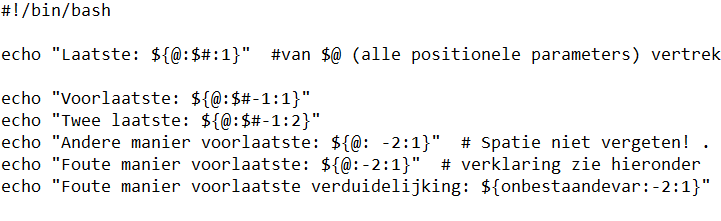
Oef 80



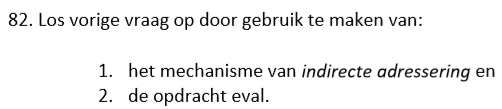


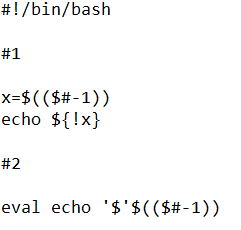
Oef 81





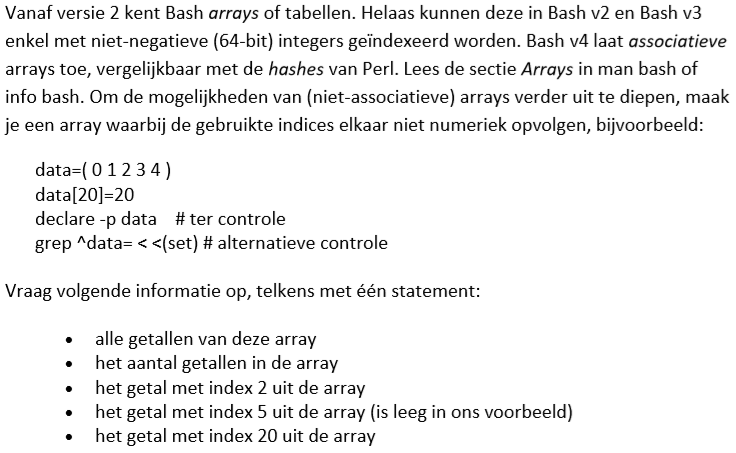
Oef 82

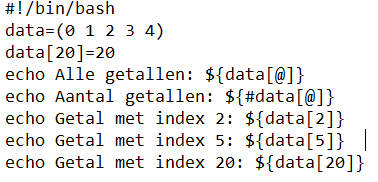




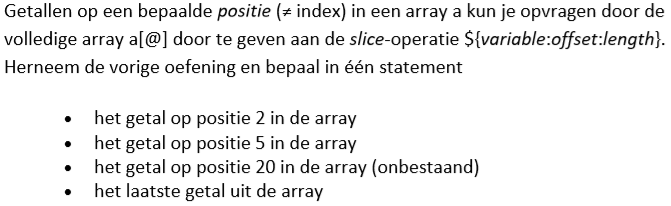
|  |  |
| --- | --- |
| **${!x}** |  |
| **eval** |  |

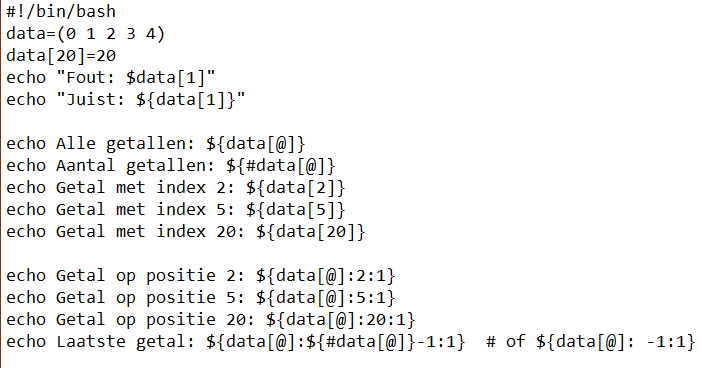
Oef 83



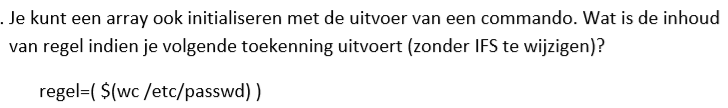


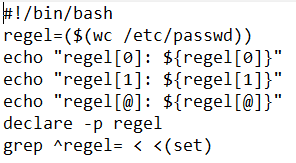
Oef 84



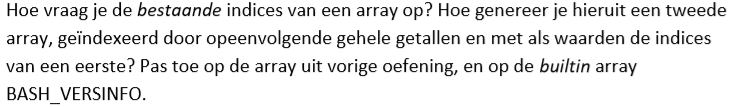


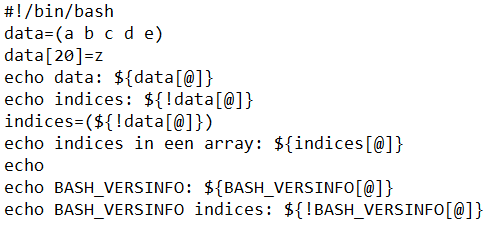
Oef 85



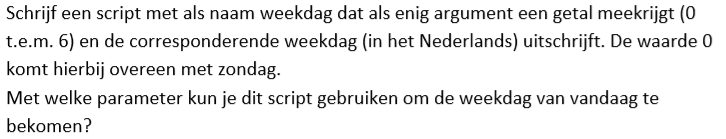


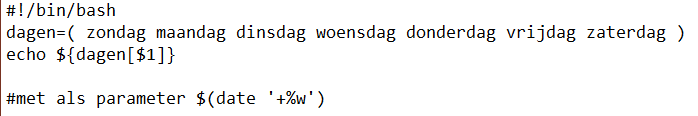
Oef 86





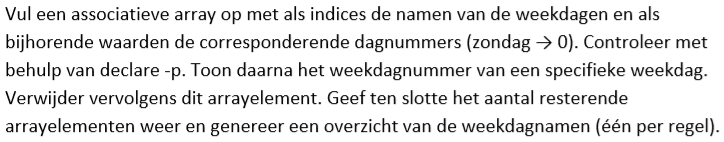
Oef 87

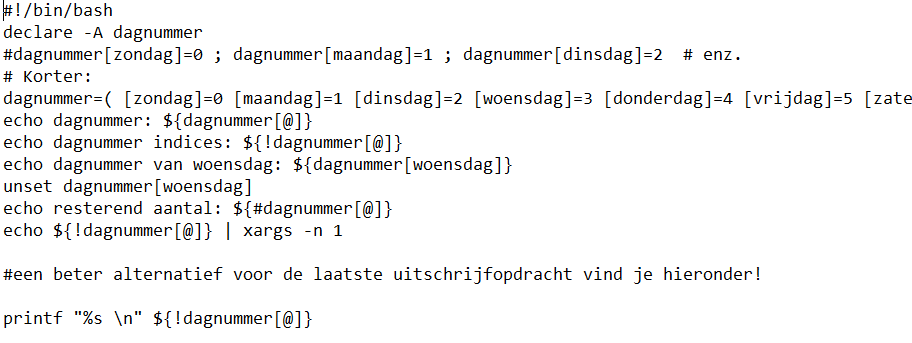




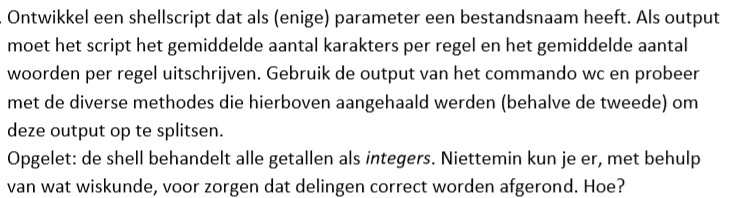
|  |  |
| --- | --- |
| **$(date ‘+%w)** |  |

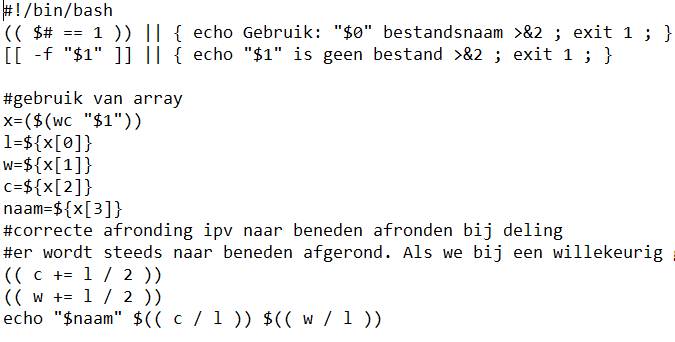
Oef 88





Oef 89

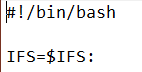




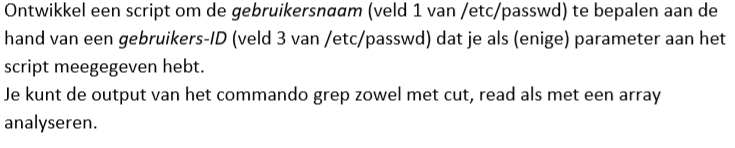
|  |  |
| --- | --- |
| Correct afronden | c/L + 1/2 = (c\*2+L)/(L\*2) = (c + L / 2)/L |
| || = else  && = if |  |

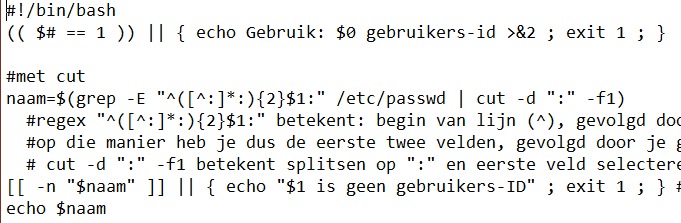
Oef 90

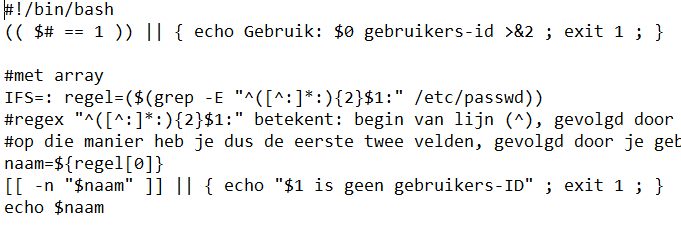


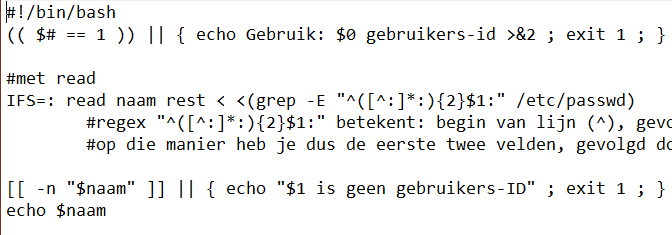


Oef 91

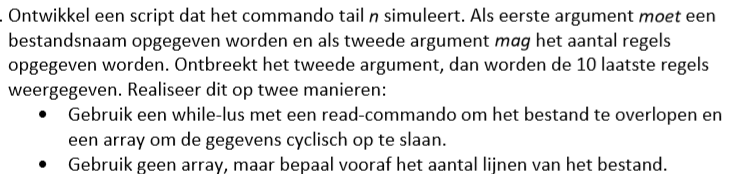


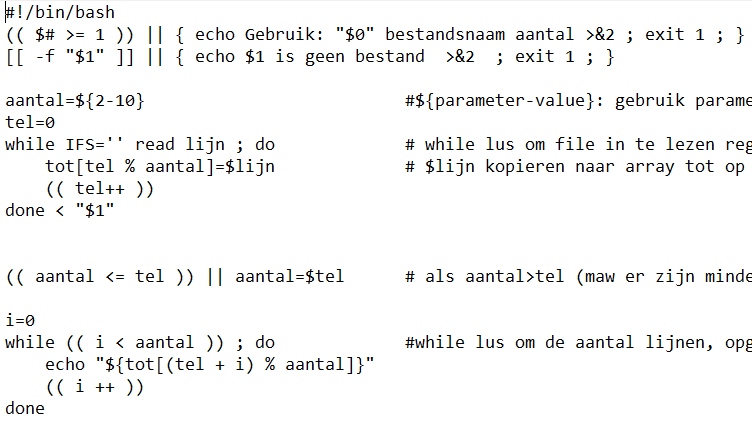


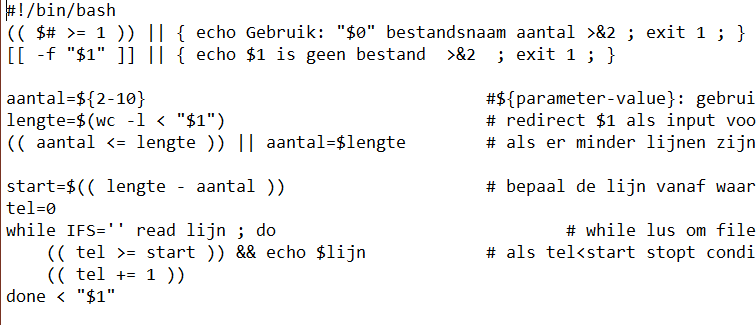




Oef 92



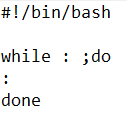




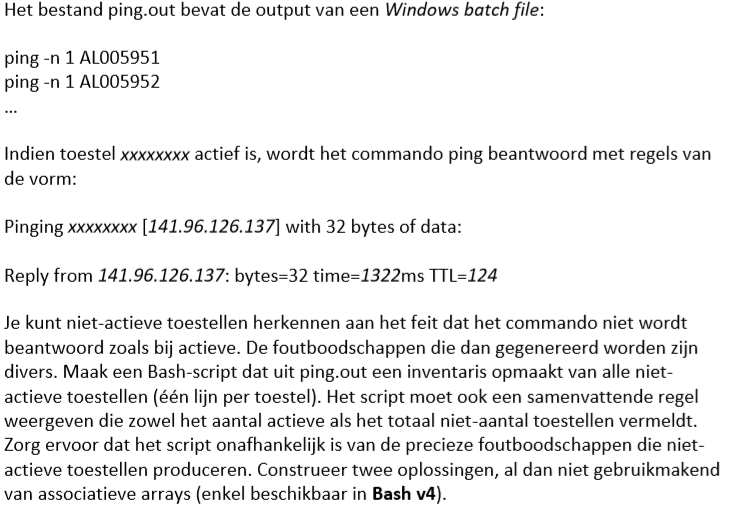
|  |  |
| --- | --- |
| **IFS = ‘’** | Witruimte vooraan niet weglaten |

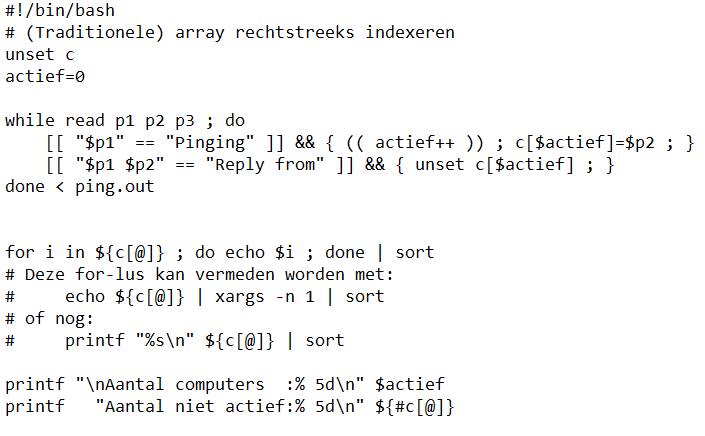
Oef 93

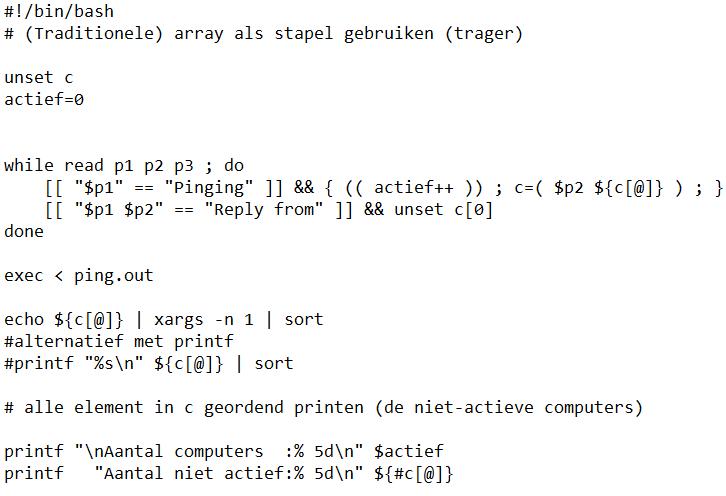


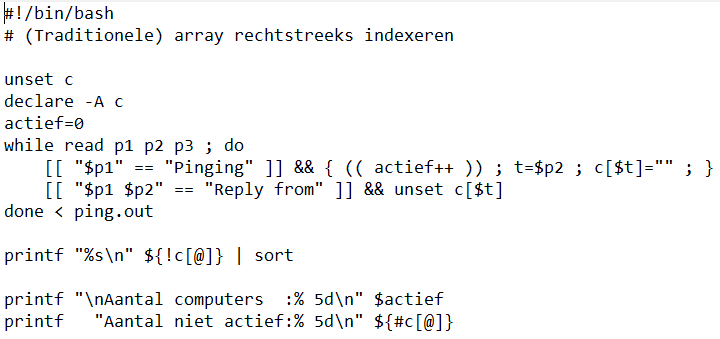


Oef 94



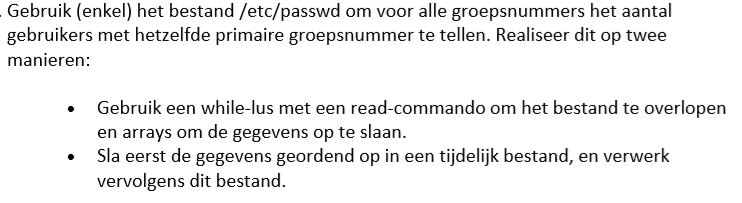


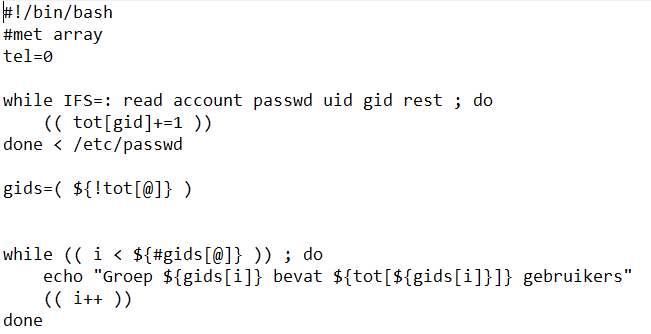


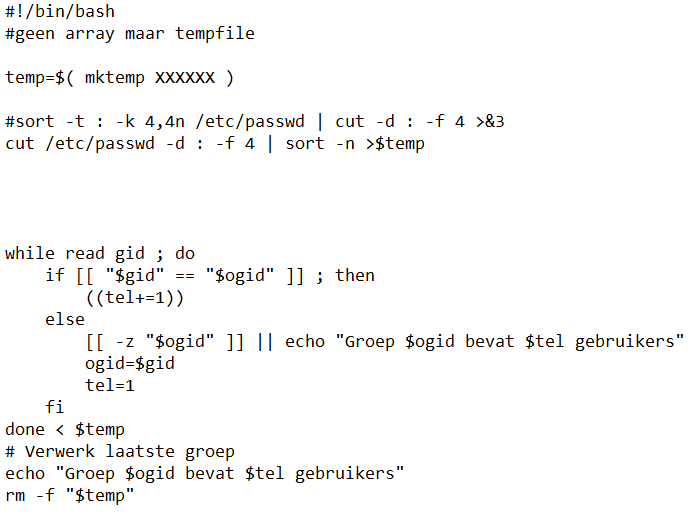


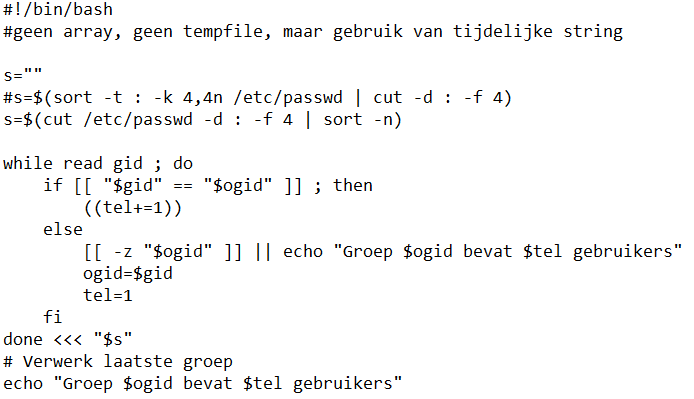
|  |  |
| --- | --- |
| **xargs** |  |

Oef 95



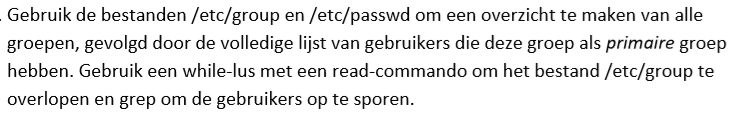


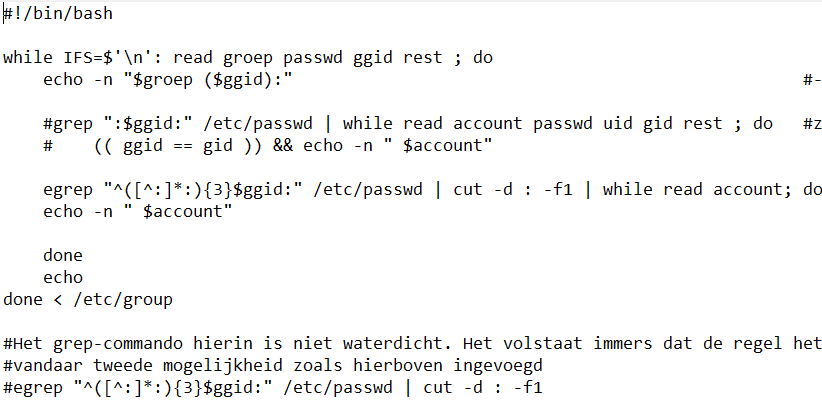


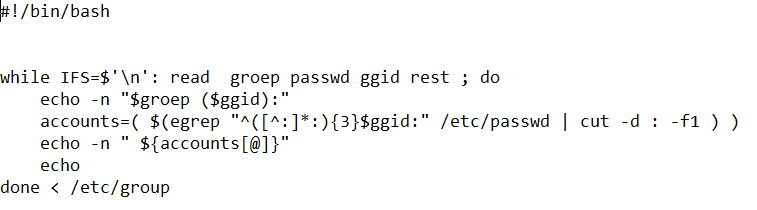


|  |  |
| --- | --- |
| **“$s”** |  |

Oef 96

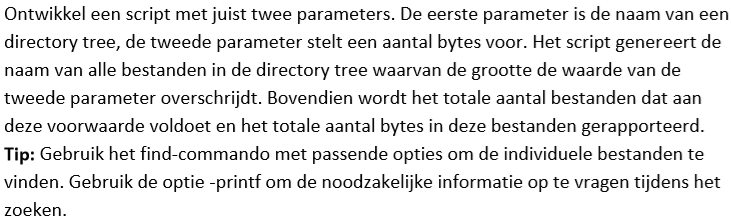


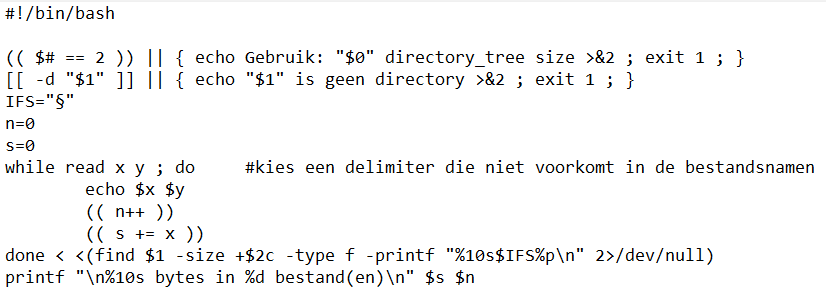




|  |  |
| --- | --- |
| **regex** |  |

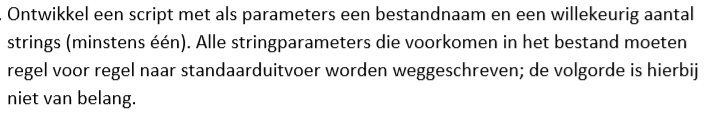
Oef 97

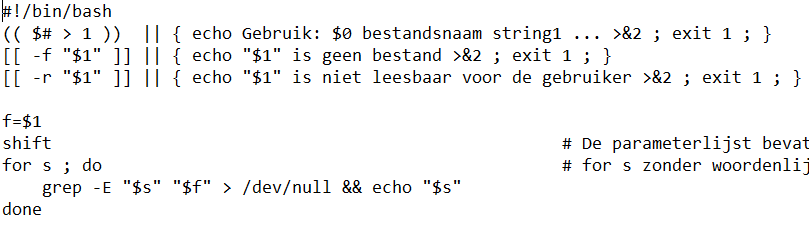




|  |  |
| --- | --- |
| **find** |  |

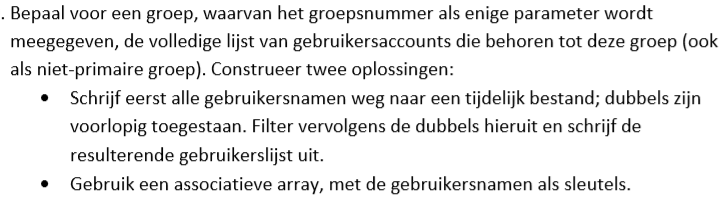
Oef 98

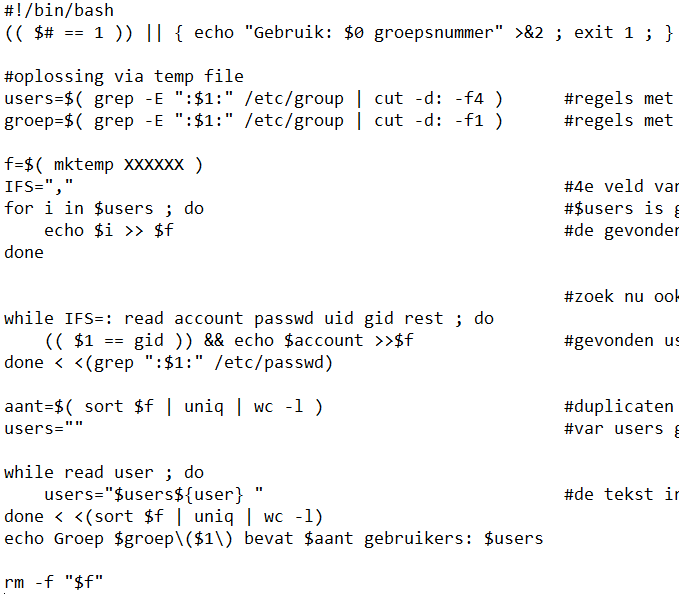


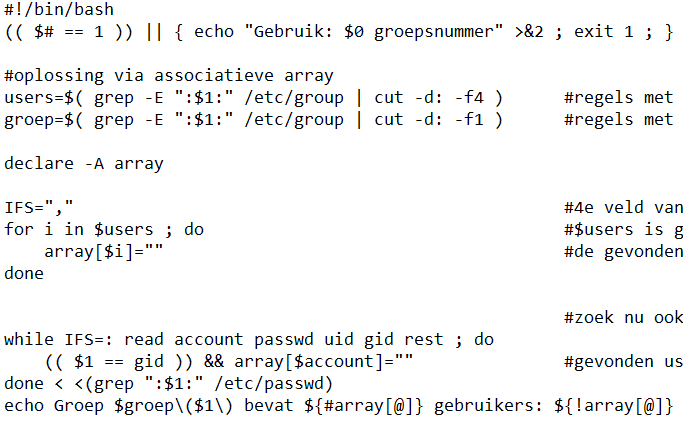


|  |  |
| --- | --- |
| **For lus** |  |

Oef 99

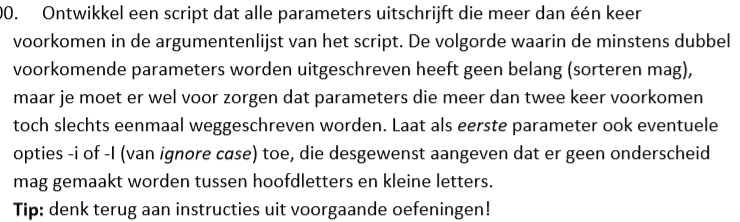


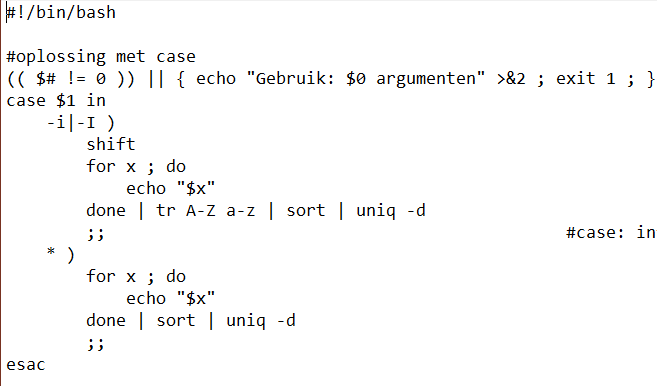


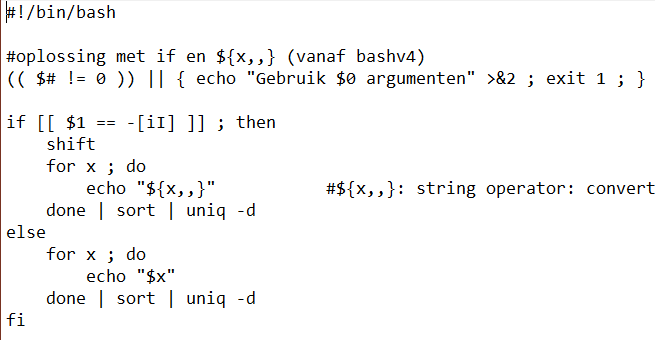


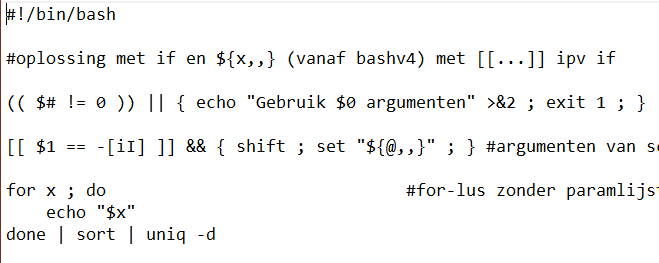
|  |  |
| --- | --- |
| **cut** |  |
| **mktemp** |  |
| **array** |  |

Oef 100



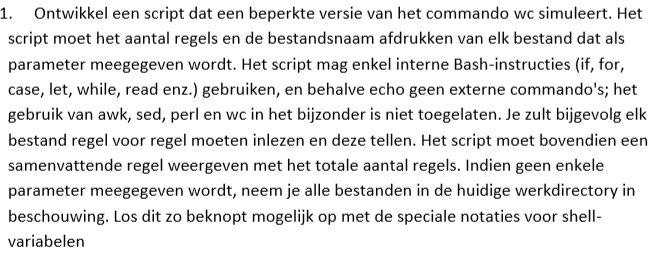


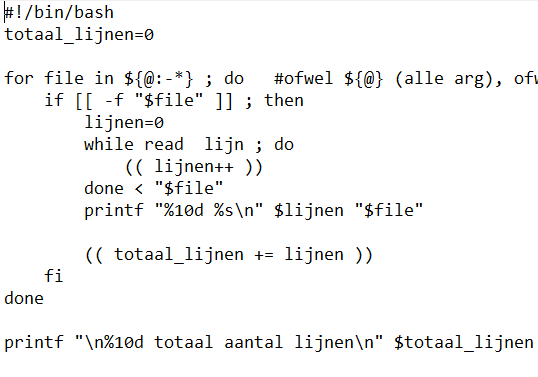




|  |  |
| --- | --- |
| **case** |  |
| **${x,,}** |  |
| **Set “${@,,}”** |  |
| **tr** |  |

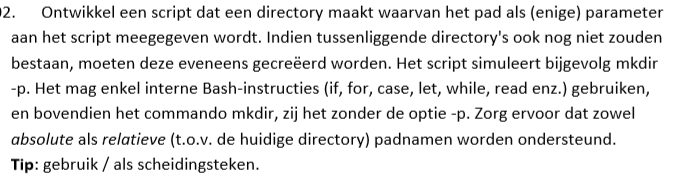
Oef 101

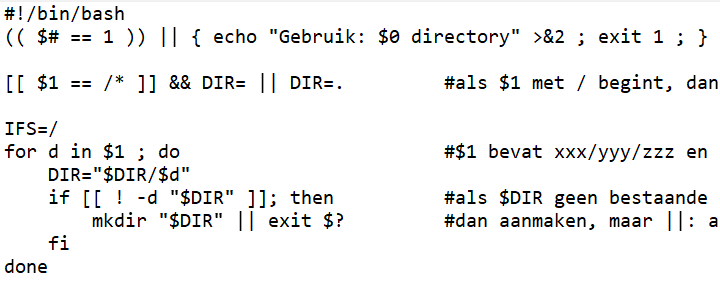




|  |  |
| --- | --- |
| **Pathname expansion** |  |

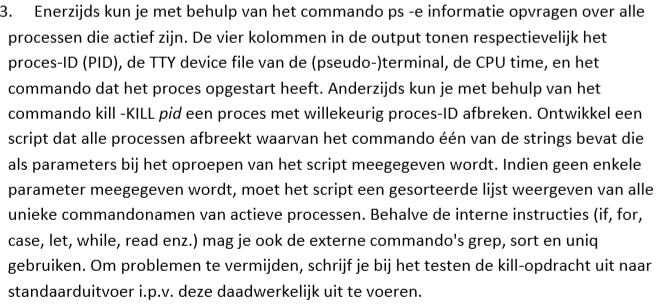
Oef 102

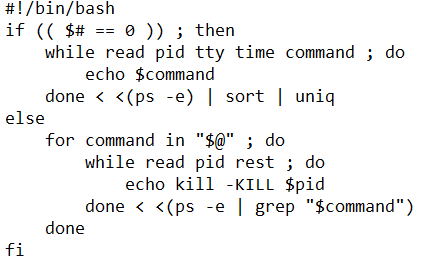




|  |  |
| --- | --- |
| **$?**  **$!** | Returnwaarde laatste commando  Pid laatste proces |

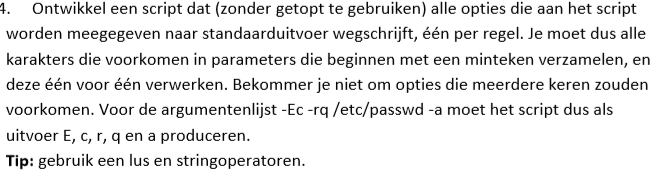
Oef 103

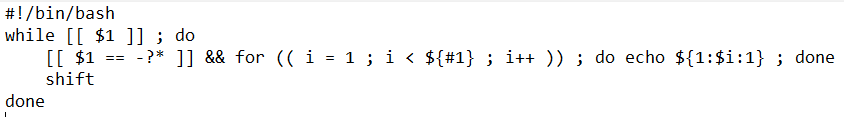


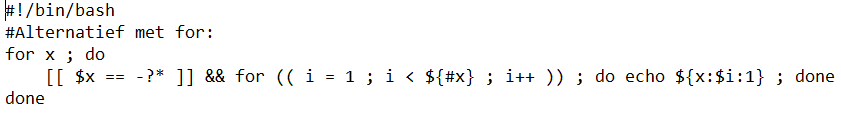


|  |  |
| --- | --- |
| **Kill** |  |
| **ps** |  |

Oef 104

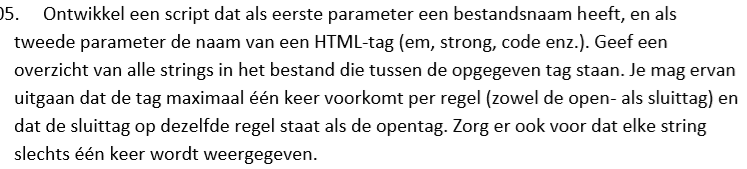


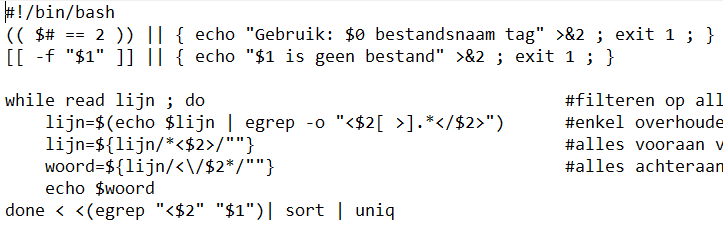


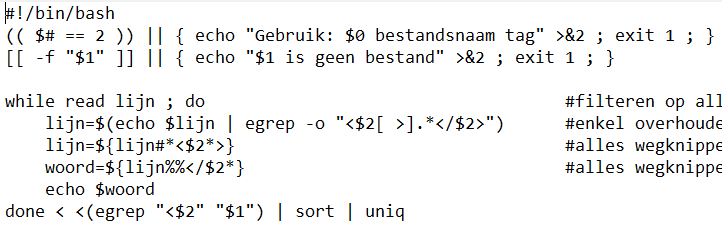


|  |  |
| --- | --- |
| **x** |  |

Oef 105



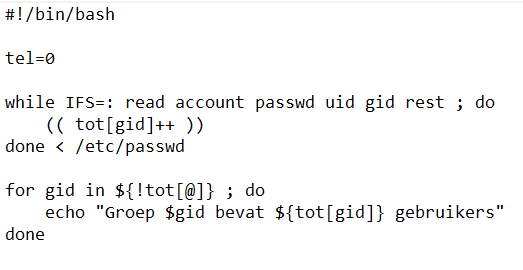




|  |  |
| --- | --- |
| **Sort** |  |
| **uniq** |  |

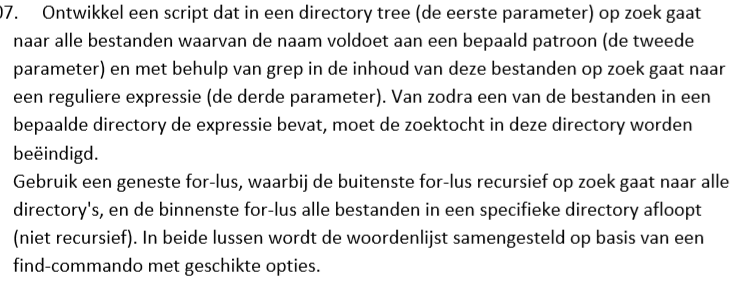
Oef 106

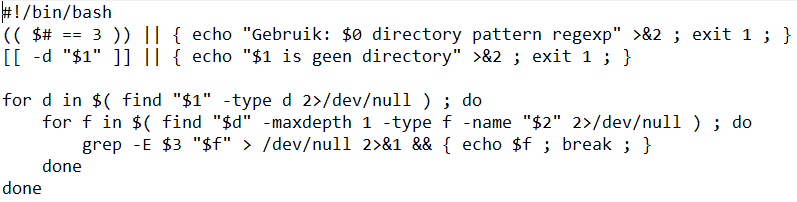




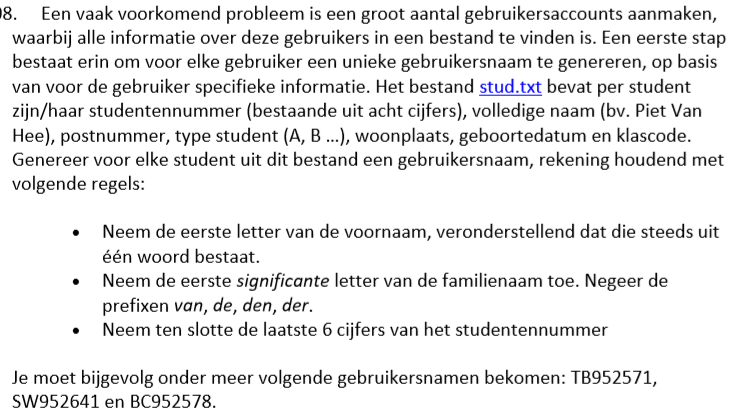
|  |  |
| --- | --- |
| **Array operations** | *Print keys*  ${!array\_name[index]}  *Alle elementen*  ${my\_array[@]}  *Array lengte*  ${#array\_name[@]}  *Voeg toe*  my\_array+=( Cobalt Nickel )  *delete element*  unset my\_array[index] |

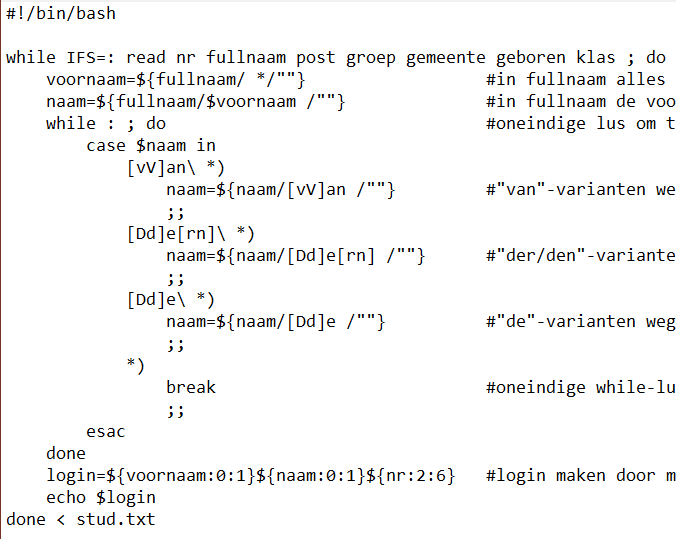
Oef 107





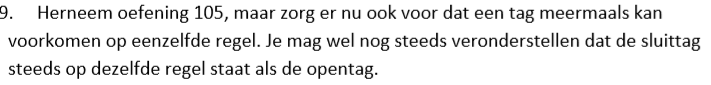
Oef 108





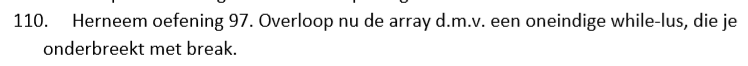
|  |  |
| --- | --- |
| **echo** |  |

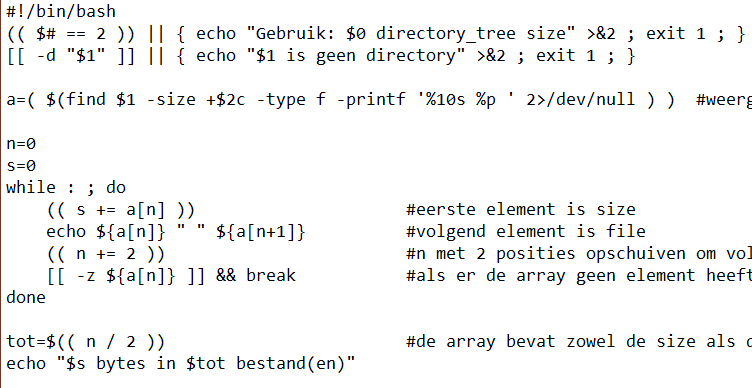
Oef 109



|  |  |
| --- | --- |
| **$#**  **$@** |  |
| **egrep** |  |

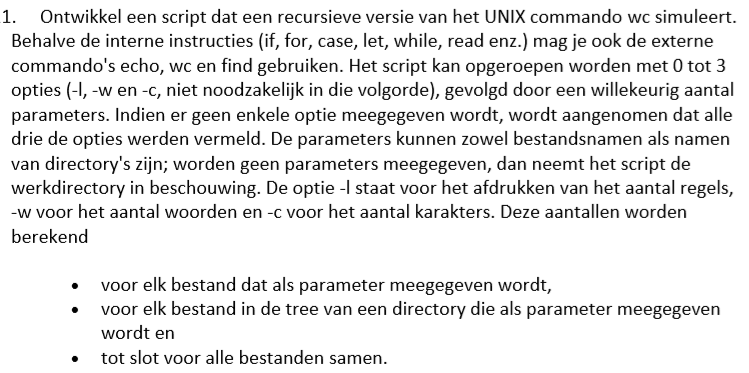
Oef 110

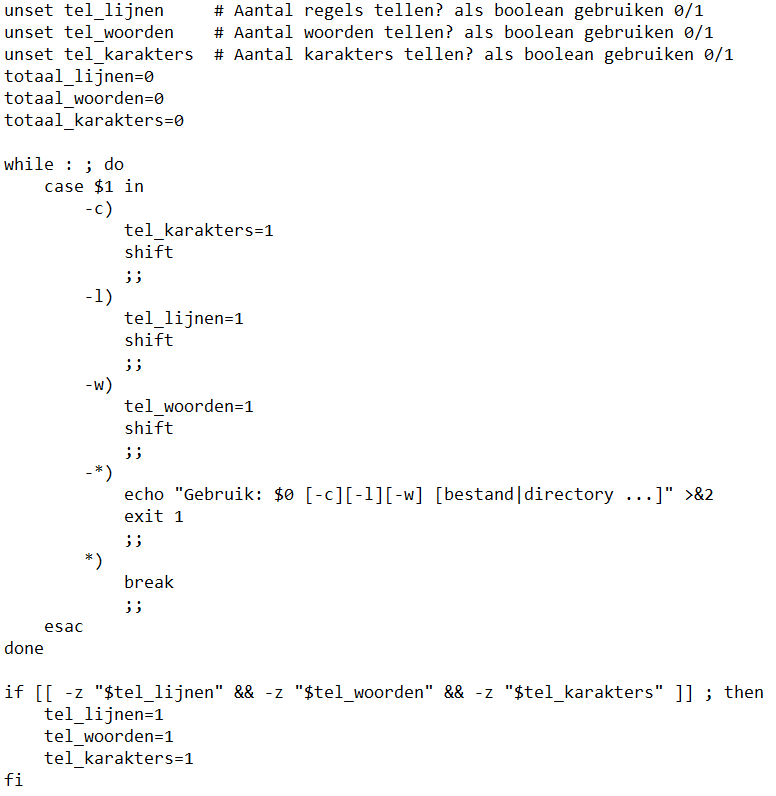


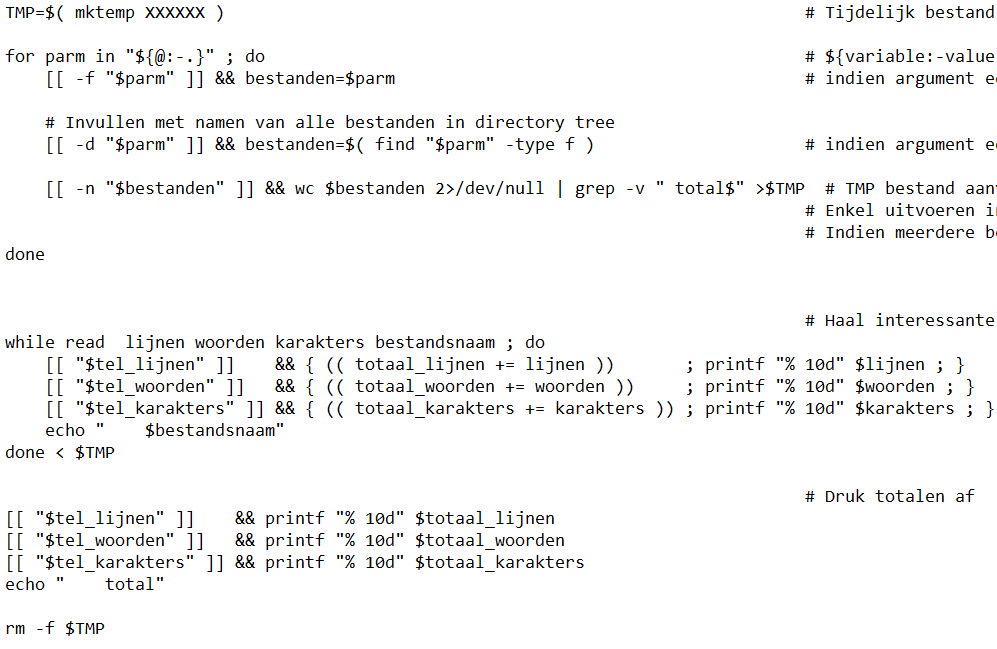


|  |  |
| --- | --- |
| **>&2** | *[n]>&word*  n is default 1   * we are redirecting stdout to file descriptor "2" meaning stderr |
| **a=( $(find $1 -size +$2c -type f -printf '%10s %p ' 2>/dev/null ) )** | *Delimiter*  IFS = default delimiters |
| **:** | = no operation  The colon builtin : is exactly equivalent to true. It's traditional to use true when the return value is important, for example in an infinite loop  It's traditional to use : when the shell syntax requires a command but you have nothing to do |
| **$(( … ))** | = arthmetic expansions  = (( … )) maar met asignment |
| **${array[n]}** | Bij indexering altijd ${} |
| **find** |  |

Oef 111

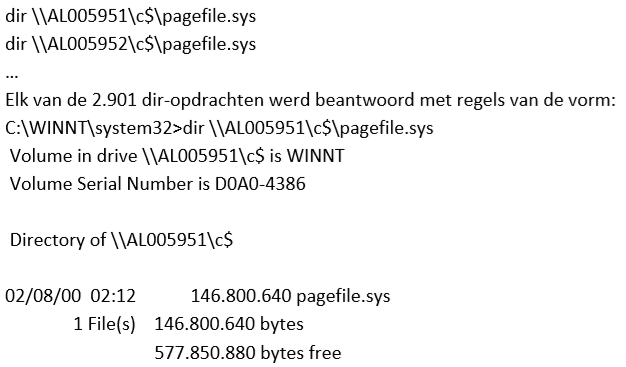


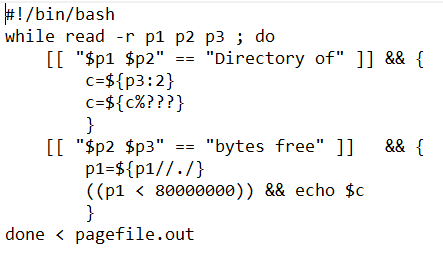




|  |  |
| --- | --- |
| **unset tel\_lijnen**  **unset tel\_woorden**  **unset tel\_karakters**  **totaal\_lijnen=0**  **totaal\_woorden=0**  **totaal\_karakters=0** | Variabelen als boolean gebruiken  0/1 |
| **case** |  |
| **“ “**  **‘ ‘** |  |
| **Volgorde operatoren** | *Zelfde precedence*  Linkse eerst |
| **mktemp** |  |
| **Wc** |  |
| **grep** |  |
| **rm** |  |

Oef 112



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|  |  |
| --- | --- |
| **Read -r p1 p2 p3** | *optie -r*  interpreteerd slashes niet als escape caracters  *read var1 var2 … varN*  hele bestand in variabelen inlezen |
| **[[ … ]]**  **(( … ))** | CONDITIONS  FILE CONDITIONS |
| **${p3:2}**  **${c%???}**  **p1=${p1//./}** | SUBSTRINGS    SUBSTITUTION    LENGTH    DEFAULT VALUES |