**Tutorial 1: Introduction**

**1.**

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| **Input** | **Process** | **Output** |
| name | get name  Message=”Hello” + name + “! Welcome to ICG511S”  display Message | message |

**2.**

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| --- | --- | --- |
| **Input** | **Process** | **Output** |
| nadDollars  exchangeRate | get nadDollars  get exchangeRate  pounds=nadDollars\*exchangeRate  display pounds | pounds |

**3.**

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| --- | --- | --- |
| **Input** | **Process** | **Output** |
| vat  costPrice | get vat=15  get costPrice  taxAmount=vat/100 \* costPrice  betaPrice=costPrice + taxAmount  sellingPrice=betaPrice + profit  display sellingPrice | sellingPrice |

**4.**

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| **Input** | **Process** | **Output** |
| phoneNumber  pin  withdrawAmount | get phoneNumber  get pin  validPin=9001  validPhoneNumber=0813396501  if phoneNumber==validPhoneNumber and if pin==validPin:  get withdraw Amount    remainingBalance=balance – withdrawAmount  display remainingBalance | remainingBalance |

**5.**

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| **Input** | **Process** | **Output** |
| bookTitle | get bookTitle  book1=”Trees”  book1Number=6  availableMessage=“Book is at shelf:”+book1Number  errorMessage=“No such book available”  if bookTitle=book1 then  display availableMessage  else  display errorMessage | availableMessage  errorMessage |

**6.**

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| --- | --- | --- |
| **Input** | **Process** | **Output** |
| item  quanitity  cashPaid  barCode | milkBarCode=0981330191  get barCode  get quantity  if barCode==milkBarCode then  itemName=”Milk”  itemPrice=18.50  totalCost=quanity\*itemPrice  change=cashPaid-totalCost  receipt=”Item: “ + itemName + “\nCost: “ + totalCost + “\nChange: “ + change  display receipt | receipt |

**7.**

|  |  |  |
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| **Input** | **Process** | **Output** |
| speed  time | get speed  get time  distance=speed \* time  display “Distance covered: “ + distance | distance |

**8.**

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| **Input** | **Process** | **Output** |
| recruitGender  recruitAge | maximumMaleRecruits=30  maximumFemaleRecruits=16  totalRunningTime=0  distanceCompleted=null  while (maleCounter=0 <= maximumMaleRecruits) or (femaleCounter=0 <= maximumFemaleRecruits) then  get recruitGender  get recruitAge    if recruitAge range from 18 to 25 then  if recruitGender=”male” then  totalRunningTime=”45 minutes”  if distanceCompleted=True then  display “Successful male applicant”  maleCounter += 1  else then  display “Unsuccesfull male applicant”  elseif recruitGender=”Female” then  totalRunningTime=”1 hour”  if distanceCompleted=True  display “Successful female applicant”  femaleCounter += 1  else  display “Unsuccessful female applicant”  else then  display “You don’t qualify to apply” |  |