Test B II - UAI 655

## Exam – written part – summer 2017

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| --- | --- |
| Name of student |  |
| Date |  |

# 1 What is right

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| --- |
| >>> a='Tyrion Lanister' |
| >>> print( [i for i in a if not i.isspace()]) # what is output ? |
| >>> print( [i for i in a if i.isdigit() or i.isspace()]) # what is output ? |
| >>> |
| How to extract from “a” only small letters? |

# 2 What is result?

|  |
| --- |
| >>> x=[10,20,30,40] |
| >>> print(x[20]) |
| # suggest to do it with Try. What error is it (except common Exception) |

# 3 What are results

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| --- |
| >>> a="Tyrion ; Lanister" |
| >>> "".join(sorted(a.upper()))  >>> "".join(sorted(a,reverse=True)) |

# 4 Draw a simple diagram – an activity diagram

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| --- |
| Draw a simple diagram to draw a html table.  The data you will read from a text file. The first line of the text file are headers, other lines texts.  Example of the html table  <table>  <tr>  <th scope="col">Item</th>  <th scope="col">Availability</th>  <th scope="col">Qty</th>  <th scope="col">Price</th>  </tr>  <tr>  <td>Don&#8217;t Make Me Think by Steve Krug</td>  <td>In Stock</td>  <td>1</td>  <td>$30.02</td>  </tr>  <tr>  <td>A Project Guide to UX Design by Russ Unger &#38; Carolyn Chandler</td>  <td>In Stock</td>  <td>2</td>  <td>$52.94 ($26.47 &#215; 2)</td>  </tr>  <tr>  <td>Introducing HTML5 by Bruce Lawson &#38; Remy Sharp</td>  <td>Out of Stock</td>  <td>1</td>  <td>$22.23</td>  </tr>  <tr>  <td>Bulletproof Web Design by Dan Cederholm</td>  <td>In Stock</td>  <td>1</td>  <td>$30.17</td>  </tr>  </table> |
|  |

# 5 What is output

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| --- |
| >>> names\_surnames={"name":"Tyrion","surname":"Lanister"}  >>> a=dict(map(reversed, names\_surnames.items())) |
| >>> print(a) # what is output?  >>> "name" in a.keys() # what is output? |
| >>> m = [{1:{1:(1,2,3)},2:(9,8,0)}] |
| >>> type(m) |
| >>> type(m[0]) |
| >>> type(m[0][1]) |
| >>> type(m[0][1][1]) |
| >>> type(m[0][1][1][1]) |

# 6 What is result

|  |
| --- |
| >>> m = [{"16":("16examples",["AAA","FFF","ABC"],"8","888","555","444")}] |
| >>> print(m[0].keys()) |
| >>> print(m[0].values()) |

# 7 What is wrong

|  |
| --- |
| s = "0123456789" \  "ABCDEFGHIJKLMNOPQRSTUVWXYZ" \  "abcdefghijklmnopqrstuvwxyz" \  "!\"#$%&'()\*+,-./:;<=>?@[\\]^\_`{|}~" |
| What is wrong with this program … mean REALLY wrong … it will be error in run |

# 8 What is output

|  |
| --- |
| >>> x = ["Yesterday","Today","Tomorrow","Day after tomorrow"]  >>> b = [(i,j) for i, j in enumerate(x,start=5)] |
| >>> print(b)  >>> type(b[1]) |

# 9 Suggest a small python program

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| Try to write a Python3 program which.   1. The man will think a number from 99 to 999 2. A program will generate a number in range 3. A man will advice – “number is higher” or “number is lower” 4. Guessing will continue until the computer guess the number |
|  |

# 10 Substrings

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| --- |
| >>> m = "I have a cat" |
| >>> m[::-2] |
| >>> m[:] |

# 11 What is result

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| --- |
| while True:  x=input("Enter letter, q for quit: ")  if x.upper() == "Q":  break  else:  print(x) |
|  |

# 12 What is output

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| --- |
| def call(v1=20,v2=5,v3=2):  if v3 > 2:  print(v1\*v2-v3)  else:  print(v3)  call(7,4,1) |
| # what is output |

# 13 What is the difference

|  |
| --- |
| 1>>> import math as m  2>>> from math import pi |
| # write d = 2 \* pi \* 5 in both cases  1>>>  2>>> |

# 14 What is output

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| --- |
| >>> x="Java Python, Ruby"  >>> x[:11].endswith("n") |
|  |
| >>> x.index("y") |
|  |
| >>> x[::-1].index("y") |
|  |

# 15 What is output

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| --- |
| # Can I ask for the Python version this way?  >>> import sys  >>> print(sys.version) |
|  |