

Facit och kommentarer till tenta 2023-02-13 i DA2004

Del A: flervalsfrågor

1. *A, C, E*
2. *B, C*
3. *A, D*
4. *E*
5. *D*
6. *E*
7. *A, E*
8. *A, D*
9. *A, B, C, D, E*
10. *B*

Del B: kodfrågor

11. Exempellösning:

```
def percent_to_float(s):  
    return float(s[:-1]) / 100
```

12.

A. Exempellösning:

```
def reverse_word(w):  
    return w[::-1]
```

B. Exempellösning:

```
def reverse_words(s):  
    words = s.split(" ")  
    out = ""  
    for w in words:  
        out += reverse_word(w) + " "  
    return out[:-1]
```

13. Exempellösning:

```
def pair_with(x,mylist):  
    if mylist == []:  
        return []  
    else:  
        return [(x,mylist[0])] + pair_with(x,mylist[1:])
```

14. Exempellösning:

```
def till_allspraket(word):  
  
    for i in range(len(word)):  
        if word[i] in "aeiouyåäö":  
            first_vowel = i  
            break  
  
    return (word[first_vowel:] + word[:first_vowel] + "all")
```

15. Exempellösning

```
while True:
    x = input("Which sample file do you want to open? ")

    try:
        if 1 <= int(x) and int(x) <= 10:
            with open("sample" + x + ".csv") as h:
                do_something(h)
            break
    except ValueError:
        print("Please input a number between 1 and 10")
    except FileNotFoundError:
        print("Could not open", "sample"+x+".csv, please try again")
```

16.

A. Exempellösning:

```
class Matrix:

    def __init__(self,m):
        self.matrix = m
        self.rows = len(m)
        self.cols = len(m[0])
```

B. Exempellösning:

```
class Identity(Matrix):

    def __init__(self,n):

        # Create identity matrix as a list of lists
        idm = []
        for i in range(n):
            idm.append(i * [0] + [1] + (n-i-1) * [0])

        super().__init__(idm)
```