SETS

PracticeQuestions

1.WriteaPythonprogramtoremoveanitemfromasetifitispresentintheset.HereBothItem andSetisenterbytheUser.

2.A.PythonProgramthatDisplaywhichLettersareintheFirstStringbutnotintheSecond.

B.PythonProgramthatDisplayswhichLettersareintheTwoStringsbutnotinBoth

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3.Programtogetallsubsetsofgivensizeofaset

Input:{1,2,3},n=2

Output:[{1,2},{1,3},{2,3}]

4.Programtofindallelementsofaset2whicharenotpresentinset1usingSet Comprehension.

Input:s1={1,2,3}s2={2,1,5,6,} Output:{1,2}

5.Writeprogramtofindmaximumproductoftwointegersinagivenset.

I/p: s={10,3,5,7}

O/p:Themaximumproductisformedbythepairis:{10,7}

6.Programtofindminimumnoofmovestoswaptheelements.

HereNisnoofelementsinaset.

Input:N=4,S={3,2,1,4}

Output:2

7.Programtogetallthestringswhichcontainsallvowels

I/p=>s={'have','a','good','day','xyz','pqr'} O/p=>{'have','a','good','day'}

8.PythonProgramtofindcommonelementsinthreelistusingsets.

9.Programtoprintthesumofmaximumandminimuminagivenset.

10.Programtocheckenteredsubsetispresentinagivensetornot.

I/p: s={2,5,1} s2={3,4,2,6,0,1,5}

O/p: YES

11.Pythonprogramtofindthedecimalofalltheitemsingivensetafterflippingthebits (firstlyconvertdecimaltobinary).

I/p: s={1,2,3}

O/p:{6,5,4}

12.Programtocreateasetwhosearethemultipleofxandpresentinset1andset2butnot nbothsets.Herexisanypositiveintegerenteredbyuser. I/P:x=2

set1={4,7,10,5,1} set2={4,10,2,6,1,9} o/p:{2,6}

13.Programtochecktheelementsofenteredstringarepresentintheitemsoftheentered set.Alsoprinttheelements.

I/p: X='ab'S={'ab','bc','pqr','bcad'}

O/p: YES
{'ab','bcad'}

14.Programtocountthewordsconsistduplicatelettersinagivenset.Alsoremoveor discardthoseelementsfromagivensetwhichconsistduplicateletter.

I/p: S={'Have','a','good','day'}

O/p: 3
S={'Have','a','day'}

15.Enteredaset(S)oflist.Wherelistconsistintegernumbers.

Writeaprogramtoprintaset(S)havingthoseitems(listofintegers)whosesumof integers

Isalwayslessthensumofintegersofthenextiteminaset.

I/p: S={[1,2,3],[3,8,5],[5,7,10],[6,2,0],[5,12,13]}

O/p: S={[1,2,3],[3,8,5],[5,7,10]}

16. Suppose u and v both have values of type set and are disjoint. Which of the following expressions evaluates to True?

u == v | (u^v)

u == (v^u)

u == v^(u | v)

u == u^(v | u)

17. Suppose u and v both denote sets in Python. What is the most general condition that guarantees that u|v == u^v?

The sets u and v should be disjoint.

The set u should be a subset of the set v.

The set v should be a subset of the set u.

This is true for any u and v.