Question 1:
Guess the output of this program:

```
1.  graph = {1:5, 5:3, 3:2, 2:-1}
2.
3.  steps = 0
4.  start = 1
5.  while start != -1:
6.      start = graph[start]
7.      steps += 1
8.
9.  print(steps)
```

Error

1

2

3

4

5

Runs forever

Question 2:
Guess the output of this program:

```
1.  my_str = 'za'
2.  my_lst = [5, 2, 3]
3.
4.  dct = {
5.      1:my_str,
6.      2:my_lst
7.  }
8.  my_lst.sort()
9.  my_str = ''.join(sorted(my_str))
10.
11. print(dct)
```

{1: 'az', 2: [2, 3, 5]}

{1: 'za', 2: [2, 3, 5]}

{1: 'za', 2: [5, 2, 3]}

Error

string is reassigned. Not affecting old str. list is changed in-place

Question 3:
Guess the output of this program:

```
1.  dct = {
2.      1:[5, 2, 3],
3.      2:[-2, 12, 3]
4.  }
5.  for value in dct.values():
```

```
6.     value.sort()
7.
8.  print(dct)
```

Error

{1: [5, 2, 3], 2: [-2, 12, 3]}

{1: [2, 3, 5], 2: [-2, 3, 12]}

Question 4:
Guess the output of this program:
```
1.  dct = {
2.      [2, 3] : 10,
3.  }
4.
5.  print(dct([2, 3]))
```

Error

10

Question 5:
Guess the output of this program:
```
1.  dct = {
2.      (2, 3) : 10,
3.      30: 70
4.  }
5.
6.  k = 2, 3,
7.  dct[k] += 20
8.  print(dct[dct[k]])
```

Error

30

70

10

Question 6:
Guess the output of this program:
```
1.  dct = {
2.      1:5,
3.      2:7,
4.      3:10
5.  }
6.
7.  print(dct[-1])
```

3

10

Question 7:

```
1.  dct = {
2.      1:5,
3.      2:7,
4.      3:10
5.  }
6.
7.  del dct
8.  print(dct)
```

UnboundLocalError: local variable 'dct' referenced before assignment

Question 8:

Guess the output of this program:

```
1.  def f():
2.      dct = {
3.          1:5,
4.          2:7,
5.          3:10
6.      }
7.
8.      del dct
9.      print(dct)
10.
11. f()
```

UnboundLocalError: local variable 'dct' referenced before assignment

NameError: name 'dct' is not defined

Question 9:

The .clear method in a dictionary object clear all keys and free the value's memory

True

In python, we can't clear values from memory. We only unbind the name/value. Garbage collector cleans automatically at some point.

Question 10:

Neither a list nor another dictionary can be used as a dictionary key

False

Question 11:

Guess the output of this program:

```
1.  dct = {
2.      1:5,
3.      2:7,
4.      3:'mostafa'
5.  }
6.
7.  print(dct[3][3].upper())
```

t

T

s

S

Error

Question 12:

Guess the output of this program:

```
1.  dct = {
2.      1:'mostafa',
3.      2:'saad',
4.  }
5.
6.  print(f"Hi {dct[1]} {dct[2]}.")
```

Error

Hi mostafa saad.

Hi {dct[1]} {dct[2]}.

Question 13:

Guess the output of this program:

```
1.  dct = {
2.      int: [6, 9, 10],
3.      float : 10
4.  }
5.  print(dct[type(float)])
```

Error

10

It should be: print(dct[float])

Question 14:

Guess the output of this program:

```
1.  dct = {
2.      1: [6, 9, 10],
3.      3 : 10
4.  }
5.
6.  dct.setdefault(3, 5)
7.  dct.setdefault(7, 5)
8.  print(dct[3] + dct[7])
```

10

15

Error