Unit 2 - Week 1

Assignment 1

The due date for submitting this assignment has passed.
As per our records you have not submitted this assignment.

Due on 2020-02-12, 23:59 IST.

1) The Executable loader format (ELF Format) which describes a structure in which executable need to be stored, is itself stored in hard-disk. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

2) Your project manager asks you to ensure that a particular source code is free from buffer overflow vulnerabilities. Which of the following would you need to look out for. *1 point*

- scanf in the code
- strcpy in the code
- For loops that manipulate arrays
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of the above

3) Which of the following gdb command is used to find memory address? *1 point*

- x
- y
- z
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
x

4) Match the following *1 point*

1. Instructions	a. Heap section
2. Global and Static Data	b. Stack section
3. Function call invocation	c. Data section
4. Dynamic allocation	d.Text section

- 1-d, 2-c, 3-b, 4-a
- 1-a, 2-b, 3-c, 4-d
- 1-b, 2-c, 3-a, 4-d
- 1-c, 2-b, 3-d, 4-a

No, the answer is incorrect.
Score: 0
Accepted Answers:
1-d, 2-c, 3-b, 4-a

5) Programmer X has found that the source code has a buffer overflow vulnerability caused by **strcpy** instruction. He then used **strncpy** in-place of strcpy to prevent buffer overflow vulnerabilities. Which of the following is True? *1 point*

- Buffer overflow vulnerabilities caused due to strcpy is avoided by bounds check
- This will not make any changes in the source code
- Buffer overflow attack will not occur in this source code
- None of these

No, the answer is incorrect.
Score: 0
Accepted Answers:
Buffer overflow vulnerabilities caused due to strcpy is avoided by bounds check

6) Which of the following tools cannot be used to read the different ELF format information? *1 point*

- objdump
- readelf
- file
- Text editor

No, the answer is incorrect.
Score: 0
Accepted Answers:
Text editor

7) GNU Debugger can be used to find the reason for segmentation faults, memory leakage etc. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
True

8) Which of the following flaw will help an attacker to get access into a system? *1 point*

- Design flaws
- Hardware Flaws
- Bug in Operating system
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of the above

9) The command "breakpoint main" will add a new breakpoint in main of the given program *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

10) Malicious code segments can be pushed into ---------- during execution and can result in ---------- attack *1 point*

- Stack, control flow
- Queue, heap exploit
- Memory, buffer overrun
- Code, heap exploit

No, the answer is incorrect.
Score: 0
Accepted Answers:
Stack, control flow

11) The gdb command "frame" is used for which of the following? *1 point*

- To change the stack frames
- To change the base pointer
- To determine the frame pointer
- Invalid instruction

No, the answer is incorrect.
Score: 0
Accepted Answers:
To change the stack frames

12) Application developed in languages like C++ cannot have buffer overflows. *1 point*

- True
- False

No, the answer is incorrect.
Score: 0
Accepted Answers:
False

13) The "step" command in GDB is used to *1 point*

- executes the current line of the given program
- stops at the next statement to be executed
- executes the current line of the given program & stops at the next statement to be executed
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
executes the current line of the given program & stops at the next statement to be executed

14) For a successful buffer overflow attack, an attacker should able to do *1 point*

- Overwrite the return address
- Should able to inject the source code
- Able to determine the location of the code
- All of the above

No, the answer is incorrect.
Score: 0
Accepted Answers:
All of the above

15) For which of the following, the ELF format is not a common standard file format? *1 point*

- File format
- Text Editor format
- Object codes
- Object dumps

No, the answer is incorrect.
Score: 0
Accepted Answers:
Text Editor format