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État	Terminé
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Temps mis	15 min
Points	9,00/16,00
Note	5,63 sur 10,00 (56%)

Question **1**

Correct

Note de 1,00 sur 1,00

What were the differences when you generated the ASM with the three different methods?

Veuillez choisir une réponse :

☒

a. They generate the same things but G++ based solutions were harder to read ✓

☐

b. They generate completely different things

☐

c. They are not intended to do the same thing

Votre réponse est correcte.

La réponse correcte est : They generate the same things but G++ based solutions were harder to read

Question **2**

Incorrect

Note de 0,00 sur 1,00

What is CPUID?

Veuillez choisir une réponse :

☐

a. It is an instruction that returns the ID of the CPU.

☐

b. It is not an instruction.

☐

c. It is an instruction that fills register with some hardware information.

☒

d. It is an instruction that prints information about the CPU on the standard output. ✗

Votre réponse est incorrecte.

La réponse correcte est : It is an instruction that fills register with some hardware information.

Question **3**

Incorrect

Note de 0,00 sur 1,00

How is returned a value from a function? Consider that the value to return is less than 64bits and not real number.

For example:

```
int func(){
    return 0;
}
```

Veuillez choisir une réponse :

☐

a. In %r99

☒

b. In the stack ✗

☐

c. In %rsb

☐

d. In %rax

Votre réponse est incorrecte.

La réponse correcte est : In %rax



Question **4**

Correct

Note de 1,00 sur
1,00

How is returned a real number from a function?

For example:

```
double func(){  
    return 0.;  
}
```

Veillez choisir une réponse :

- ☐ a. In %rax
- ☐ b. It is impossible.
- ☒ c. In %xmm0 ✓
- ☐ d. In %ymm0

Votre réponse est correcte.

La réponse correcte est : In %xmm0

Question **5**

Correct

Note de 1,00 sur
1,00

What is the instruction to multiply two integers?

Veillez choisir une réponse :

- ☐ a. muli
- ☐ b. mul
- ☒ c. imul ✓

Votre réponse est correcte.

La réponse correcte est : imul

Question **6**

Correct

Note de 1,00 sur
1,00

If 7 long int are passed in parameters to a function, how is passed the 7th one?

Veillez choisir une réponse :

- ☐ a. In %rax
- ☒ b. In the stack ✓
- ☐ c. It cannot be passed
- ☐ d. In a special register that we do not know in advance

Votre réponse est correcte.

La réponse correcte est : In the stack



Question **7**

Correct

Note de 1,00 sur
1,00

What does the "cmp" instruction do?

Veuillez choisir une réponse :

- ☒ a. It compares two registers and put the results in special registers that can be read by conditional jump instructions ✓
- ☐ b. It performs the complement of the first register and stores the result in the second register.
- ☐ c. It compares two registers and puts the result in the second register

Votre réponse est correcte.

La réponse correcte est : It compares two registers and put the results in special registers that can be read by conditional jump instructions

Question **8**

Correct

Note de 1,00 sur
1,00

What is a register?

Veuillez choisir une réponse :

- ☐ a. A part of the cache memory.
- ☐ b. A part of the hard-drive.
- ☒ c. A very fast memory located near the CPU core. ✓
- ☐ d. A very fast memory located near the PCI.

Votre réponse est correcte.

La réponse correcte est : A very fast memory located near the CPU core.

Question **9**

Correct

Note de 1,00 sur
1,00

What is a label in Asm?

Veuillez choisir une réponse :

- ☐ a. It is a comment.
- ☐ b. It is a string used by the CPU at run time.
- ☐ c. It is a special instruction.
- ☒ d. It is a key that can be referenced to jump at its position. ✓

Votre réponse est correcte.

La réponse correcte est : It is a key that can be referenced to jump at its position.

Question **10**

Correct

Note de 1,00 sur
1,00

What is the "stack"?

Veuillez choisir une réponse :

- ☐ a. A very fast memory.
- ☐ b. A special memory device.
- ☒ c. A normal memory used to store any static variable (like "int i" and "double j"). ✓
- ☐ d. A normal memory used to stores only integers (like "int i" but not "double j").

Votre réponse est correcte.

La réponse correcte est : A normal memory used to store any static variable (like "int i" and "double j").



Question **11**

Correct

Note de 1,00 sur
1,00

Do the same assembly instructions exist everywhere (on all CPUs) ?

Veuillez choisir une réponse :

- ☐ a. Yes
- ☒ b. No ✓

Votre réponse est correcte.

La réponse correcte est : No

Question **12**

Non répondue

Noté sur 1,00

Find the original C code that was used to generate this assembly code:

```
test(long, long):  
    addq    %rsi, %rdi  
    imulq   $1000, %rdi, %rax  
    ret
```

Veuillez choisir une réponse :

- ☐ a. long int test(long int p1, long int p2){
 p2 += p1;
 p1 *= 1000;
 return p1;
}
- ☐ b.
long int test(long int p1, long int p2){
 p1 += p2;
 p1 *= 1000;
 return p1;
}
- ☐ c. double test(double p1, double p2){
 p1 += p2;
 p1 *= 1000;
 return p1;
}
- ☐ d.
long int test(long int p1, long int p2){
 p1 *= 1000;
 p1 += p2;
 return p1;
}

Votre réponse est incorrecte.

La réponse correcte est :

```
long int test(long int p1, long int p2){  
    p1 += p2;  
    p1 *= 1000;  
    return p1;  
}
```



Question **13**

Non répondue

Noté sur 1,00

What is the C code that was used to generate the following assembly code (X has been voluntary overwritten):

```
test(X*):  
    leaq 8(%rdi), %rax  
    ret
```

Veillez choisir une réponse :

- ☐ a. `void* test(int* p1){
 p1++;
 return p1;
}`
- ☐ b. `void* test(char* p1){
 p1++;
 return p1;
}`
- ☐ c. `void* test(long int* p1){
 p1++;
 return p1;
}`
- ☐ d. `void* test(short* p1){
 p1++;
 return p1;
}`

Votre réponse est incorrecte.

La réponse correcte est : `void* test(long int* p1){
 p1++;
 return p1;
}`

Question **14**

Incorrect

Note de 0,00 sur 1,00

If in a classic git directory I do:

```
git remote add other git@git.unistra.fr:bbramas/csmi-tp-2020.git
```

Considering I am in the master branch, which commands are correct:

Veillez choisir au moins une réponse :

- ☐ a. `git push origin other`
- ☐ b. `git push other master`
- ☒ c. `git checkout other` ✖
- ☐ d. `git pull other`

Votre réponse est incorrecte.

Les réponses correctes sont : `git push other master`, `git pull other`



Question 15

Incorrect

Note de 0,00 sur 1,00

Considering the following work history:

```
git pull // We are on master and up to date on commit [A]
git commit -a -m "... " // [B]
git commit -a -m "... " // [C]
git checkout -b new-branch
git commit -a -m "... " // [D]
git pull
```

If I do "git rebase master" what will happen ?

- Veuillez choisir une réponse :
- ☐ a. We will apply D to master
 - ☐ b. We cannot know, because master has changed due to the last pull
 - ☒ c. We will apply commits B, C and D to master ✖
 - ☐ d. Nothing, because master did not change
 - ☐ e. We will shift to commit [A]

Votre réponse est incorrecte.

La réponse correcte est : Nothing, because master did not change

Question 16

Incorrect

Note de 0,00 sur 1,00

Considering the following state:

```
      A---B---C feature
      /
----D---E---F---G master
```

Operation X

```
      A---B---C feature
      /       \
----D---E---F---G master
```

Operation Y

```
              A---B---C feature
              /
----D---E---F---G master
```

- Veuillez choisir au moins une réponse :
- ☒ a. X: git rebase feature ✖
 - ☐ b. X: git rebase master
 - ☐ c. X: git merge feature
 - ☒ d. X: git merge master ✖
 - ☐ e. Y: git rebase feature
 - ☐ f. Y: git rebase master
 - ☐ g. Y: git merge feature
 - ☐ h. Y: git merge master

Votre réponse est incorrecte.

Les réponses correctes sont : X: git merge feature, Y: git rebase master

