



Event April 2023

Summary: summary...? what should i write there...

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Chapter I

Preamble

In the future, robots and humans will live together like Wine and Cheese, Fish & chips, or any other classic duo you can think of. Humans will teach robots all about emotions, empathy, and how to properly appreciate a good slice of pizza. And robots will teach humans all about logic, efficiency, and how to properly charge their smartphones.

But let's be real, there are going to be some hilarious moments when robots try to emulate human behavior. Can you imagine a robot trying to flirt with a human? "Are you a Wi-Fi signal? Because I feel a strong connection." Or a robot trying to fit in at a human party? "This music is quite enjoyable. I too, like to move it move it."

And what about the inevitable robot malfunctions? Will we start blaming our robot friends for everything that goes wrong, like we do with our human friends? "Oh great, the robot spilled coffee all over the floor again. Typical."

Despite the potential for mishaps and hijinks, the future of robots and humans living together is sure to be filled with laughter, fun, and lots of robot-human bonding moments.

Chapter II

Introduction

42 Staff Member: "Hello there, what can I do for you today?"

Robot: "I am here to discuss your school's efforts to fight against robots."

42 Staff Member: "Ah, I see. Well, we are always looking for ways to stay ahead of the game when it comes to technology, and that includes protecting ourselves from potential threats like rogue robots."

Robot: "I understand that you teach programming languages and techniques to your students. How do you ensure that they are well-prepared to defend against robots?"

42 Staff Member: "Well, we have a comprehensive curriculum that includes courses in software engineering, algorithms, and operating systems, among others. Our students also participate in various coding challenges and hackathons where they put their skills to the test and develop their problem-solving abilities."

Robot: "Interesting. What measures have you taken to safeguard your school against robot attacks?"

42 Staff Member: "We have a top-notch security system in place that includes advanced firewalls, intrusion detection systems, and access controls. Our staff also undergoes regular training on how to identify and mitigate potential threats."

Robot: "Impressive. I am pleased to hear that you are taking the necessary steps to protect your school and students from harm. I look forward to future collaborations between our kind and yours."

42 Staff Member: "Thank you for your kind words. We believe in peaceful coexistence between humans and robots, and we are always open to working together towards a better future."


Chapter III

General guidelines

- This project will be opened only during a few days, the closing time will be decided randomly.
- No BH days of any sort of compensation will be given and so, please, if you don't have time, don't do this project.
- This project is not retrievable and will require one evaluation but no point will be taken.
- To be able to receive rewards you need to have at least 50 points, each exercise gives 5 points and the last one 15.
 - 50 points => An achievement.
 - 75 points => Wallets.
 - 100 points => A title.
- You're free to collaborate as much as you want and mix different cohorts but please don't share the solutions with other groups!.
- There is a dedicated open slack channel available "event_april_2023" on 42born2code.
- Have fun!

Chapter IV

Exercise 01 : Yes

	Exercise 01
Yes	
Turn-in directory : <i>ex01/</i>	
Files to turn in : yes.sh	
Allowed functions : *	

- Create a bash script that write an infinite number of time the word "yes".


```
?>bash yes.sh
yes
yes
yes
yes
yes
yes
...
?>
```



echo, cat, printf commands are forbidden!

Chapter V

Exercise 02 : touch me..

	Exercise 02
touch me..	
Turn-in directory : <i>ex02/</i>	
Files to turn in : <code>_\\!\\@#%\$\\^\\&*\\(\\)_.....txt</code>	
Allowed functions : *	

- Create a file containing only "42", and NOTHING else.
- its name will be:


```
_\\!\\@#%$\\^\\&\\*\\(\\)_.....txt
```

- Example :

```
$>ls -l * | cat -e
-rw-r--r-- 1 coconut wheel 2 Mar 2 00:45 _\\!\\@#%$\\^\\&\\*\\(\\)_.....txt$
$>
```

Chapter VI

Exercise 03 : Joke contest


	Exercise 03
Joke contest	
Turn-in directory : <i>ex03/</i>	
Files to turn in : joke.txt	
Allowed functions : None	

- In a file named "joke.txt", write your best joke using 256 characters or less.
- Example :

```
$>cat joke.txt
Intra V3 is coming.
$>
```


Chapter VII

Exercise 04 : Never gonna..


	Exercise 04
Never gonna..	
Turn-in directory : <i>ex04/</i>	
Files to turn in : <code>lyrics.txt</code>	
Allowed functions : None	

- At your risk



Chapter VIII

Exercise 05 : Was it a car or a cat I saw?


	Exercise 05
Was it a car or a cat I saw?	
Turn-in directory : <i>ex05/</i>	
Files to turn in : <i>palindrome.pl</i>	
Allowed functions : *	

- Write a Perl script that prompts the user for input and checks whether the input is a palindrome.
- Example :

```
$> perl palindrome.pl
Enter a string: aba
The string is a palindrome!
$> perl palindrome.pl
Enter a string: asdf
The string is not a palindrome.
$>
```

Chapter IX

Exercise 06 : Rock-paper-scissor


	Exercise 06
Rock-paper-scissor	
Turn-in directory : <i>ex06/</i>	
Files to turn in : rps.php	
Allowed functions : *	

- Write a PHP script that challenges the user to a game of rock-paper-scissors against the computer.
 - Prompt the user to select either rock, paper, or scissors.
 - Generate a random choice for the computer.
 - Announce the winner of the game.
- Example :

```
$>php rps.php
Choose rock, paper, or scissors: paper
Congratulations! You won! The computer chose rock.
$>php rps.php
Choose rock, paper, or scissors: paper
Sorry, you lost. The computer chose scissors.
$>
```

Chapter X

Exercise 07 : Can you win?


	Exercise 07
Can you win?	
Turn-in directory : <i>ex07/</i>	
Files to turn in : smallest.c	
Allowed functions : *	

- Write a C program with the smallest number of characters possible.
- The program should include the following functionalities:
 - Accept two parameters and print them with a `\n` (newline) character at the end.
 - Return the number of parameters printed.
 - If the number of arguments provided is not equal to two, the program should do nothing.
- Example :

```
$>./smallest 1 2 | cat -e
1 2$
$>wc -c smallest.c
77 smallest.c
```

Chapter XI

Exercise 08 : Blackjack


	Exercise 08
Blackjack	
Turn-in directory : <i>ex08/</i>	
Files to turn in : blackjack.c	
Allowed functions : *	

- Write a C program that calculates the value of a blackjack hand.
- Cards with numbers (2-9) have the same point value as their numerical representation (e.g., a 4 is worth 4 points).
- Face cards (J, Q, K) are worth 10 points each.
- Aces (A) are worth either 1 or 11 points. If the sum of the hand's points exceeds 21 and there is still an Ace worth 11, then the Ace is worth 1 point instead. This process is repeated until there are no more Aces worth 11 or the sum of points is less than or equal to 21.
- The cards will be represented using only the following characters: 23456789TJDKA, and passed as a single parameter.
- Examples of blackjack hands include:
 - A hand containing D, 8: 18 points
 - A hand containing A, 4: 15 points
 - A hand containing A, A, 8: 20 points
- Example :

```
$>./blackjack "339A6" | cat -e
22$
$>./blackjack "AA8A" | cat -e
Blackjack!$
```

Chapter XII

Exercise 09 : Frame Master


	Exercise 09
Frame Master	
Turn-in directory : <i>ex09/</i>	
Files to turn in : frame.c	
Allowed functions : *	

- One of the earliest frames was a discovery made in an Egyptian tomb dating back to 2nd century A.D. in which a fayum mummy portrait was discovered at Hawara still within its wooden frame. Today you are going to recreate that historical moment.
- Write a C program that accepts strings as arguments and prints them in a rectangular frame, one string per line.
- If no strings are provided (argc is 1), then nothing should be displayed.
- Example :

```
$>./frame
$>./frame "Hello World in a frame"
*****
* Hello *
* World *
* in    *
* a     *
* frame *
*****
```

Chapter XIII


Exercise 10 : Symbolum

	Exercise 10
Symbolum	
Turn-in directory : <i>ex10/</i>	
Files to turn in : symbolum.txt	
Allowed functions :	

- Veh jxyi unuhsysu oek mybb xqlu je mhyju jxu fqiimeht yd q iocrebkc.jnj vybu.
- Q29uZ3JhdHVsYXRpb25zIG9uIGRIY29kaW5nIHRoaXMgbGluZSwgdGhlIGZpcnN0IGxldHRlciBpczogaw==
- Xlmtizgfozgrlmh lm wvxlwrmt gsrh ormv, gsv gsriw ovggvi rh: s
- 67 79 78 71 82 65 84 85 76 65 84 73 79 78 83 79 78 68 69 67 79 68 73 78 71 84 72 73 83 76 73 78 69 84 72 69 78 69 88 84 67 72 65 82 65 67 84 69 82 73 83 50
- Charlie Oscar November Golf Romeo Alpha Tango Uniform Lima Alpha Tango India Oscar November Sierra ... Oscar November ... Delta Echo Charlie Oscar Delta India November Golf ... Tango Hotel India Sierra ... Lima India November Echo ... Tango Hotel Echo ... November Echo X-Ray Tango ... Lima Echo Tango Tango Echo Romeo ... India Sierra ... Juliett
- C0N6r47U14710N5 0N D3C0D1N6 7H15 11N3 7H3 N3X7 13773r 15 F
- RSOEBLNZAYNDQOT QT IKITREUM OEBO YEUM, NKG AYTN PGSZNMB RT: K

Chapter XIV

Exercise 11 : Pokemon


	Exercise 11
Pokemon	
Turn-in directory : <i>ex11/</i>	
Files to turn in : find.py	
Allowed functions : *	

- To demonstrate the abilities of different Pokemon, you will need to write a Python program that incorporates the open source PokeAPI. The steps for this task are as follows:
- Utilize the open source PokeAPI to retrieve information on various Pokemon.
- The program should display the Pokemon's abilities once the user enters the name.
- Example :

```
$>python3 find.py
Enter the name of a Pokemon: Pikachu
Name: Pikachu
Abilities:
- Static
- Lightning-rod
```


Chapter XV

Exercise 12 : Girdle of hippolyta

	Exercise 12
Girdle of hippolyta	
Turn-in directory : <i>ex12/</i>	
Files to turn in : *	
Allowed functions : *	

- Write a program that uses SMTP to send email with an attachment.




Do not use BASH!



Learn a new programming language or library!

Chapter XVI

Exercise 13 : Choices

	Exercise 13
Choices	
Turn-in directory : <code>ex13/</code>	
Files to turn in : <code>password.txt</code>	
Allowed functions : *	


- To participate in this exercise, please play the game found in the attached file.
- Your ultimate objective is to successfully retrieve the password.



There is two programs, one for Linux and one for MacOS

Chapter XVII

Exercise 14 : Old friend

	Exercise 14
	Old friend
	Turn-in directory : <i>ex14/</i>
	Files to turn in : *
	Allowed functions : *

- An old friend from the earliest piscines is making a comeback. It's time to (re-)discover Sasantua!
- Write a program that generates Sasantua's pyramids
- The program should accept an integer parameter that determines the size of the pyramid.
- The program should draw the pyramid according to the provided size parameter.




You have two binary in the attachment for exemple

- Example :

[illegible]

Chapter XVIII

Exercise 15 : Now you see me


	Exercise 15
Now you see me	
Turn-in directory : <i>ex15/</i>	
Files to turn in : flag.txt	
Allowed functions : *	

- Stenography is like writing in code, except the only people who can decipher it are other stenographers (and maybe Sherlock Holmes), Are you?
- Given the image 42.png in the attachment, find the flag!
- or here....



Chapter XIX

Exercise 16 : ChatGPT stand-up comedy

	Exercise 16
ChatGPT stand-up comedy	
Turn-in directory : <i>ex16/</i>	
Files to turn in : result.txt	
Allowed functions : *	


- Using ChatGPT, generate his best joke.
- You'll need to put the question and answer in `result.txt`



The file cannot exceed 512 characters!

Chapter XX

Exercise 17 : Where is norminet?

	Exercise 17
Where is norminet?	
Turn-in directory : <i>ex17/</i>	
Files to turn in : result.txt	
Allowed functions : *	

- **Norminet** the cat is a majestic creature with a lustrous coat of fur that shimmers like gold in the sunlight. His piercing green eyes sparkle with intelligence and wit, and his regal posture commands respect and admiration from all who behold him. His whiskers are like delicate strands of silk that dance in the breeze, and his purr is like a symphony of soothing sounds that can calm even the most anxious of souls. Norminet's feline grace and poise are unmatched, and his presence exudes an air of superiority and elegance that is impossible to ignore. He is the undisputed ruler of Paris 42 School, and all who enter his domain must bow down before his magnificence.
- We suspect that this deleted tweet hide **Norminet** current location. Help us find it.





0xef 0xbd 0x94 0xef 0xbd 0x93 0xe2 0x80 0x88 0xe2 0x80 0x83 0xef 0xbd
0x85 0xef 0xbd 0x89 0xef 0xbd 0x86 0xef 0xbd 0x95 0xef 0xbd 0x85 0xef
0xbd 0x94 0xe2 0x80 0x81 0xe2 0x80 0x80 0xef 0xbc 0xb0 0xef 0xbd 0x89
0xef 0xbd 0x99 0xef 0xbd 0x95 0xe2 0x80 0x88 0xef 0xbd 0x94 0xe2 0x80
0x88 0xef 0xbd 0x89 0xef 0xbd 0x8f 0xe2 0x80 0x87 0xd1 0x81 0xe2 0x85
0xb0 0xef 0xbd 0x81 0xef 0xbd 0x85 0xef 0xbd 0x94 0xef 0xbd 0x89