

mistral



mistral software development powerhouse presenting

Gigi School of Coding





mistral

FOUNDED IN 2010

EMPLOYS 114 PROFESSIONALS

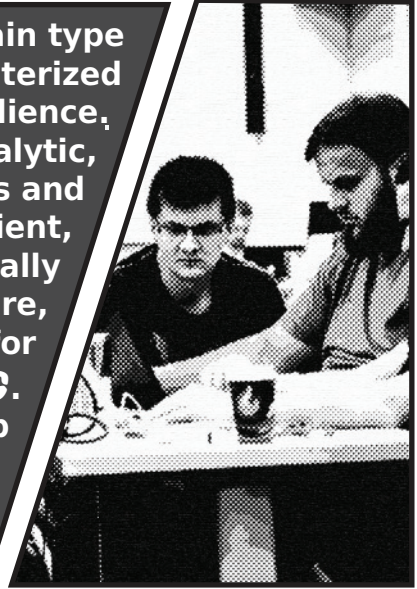
**VOTED THE MOST DESIRED
IT EMPLOYER IN 2017**

**TRUSTED PARTNER OF MAJOR
INTERNATIONAL CORPORATIONS**

**STATUS:
IN A HAPPY RELATIONSHIP
WITH CODE**

IS THIS FOR YOU

MISTRAL tends to attract a certain type of personality, characterized by strength and resilience. If you are tough-minded and analytic, open to new experiences and learning, emotionally resilient, user-oriented, and intrinsically motivated like we are, we dare you to apply for **GIGI SCHOOL OF CODING**. This internal Mistral internship is designed to boost your existing mad skills into **SUPERPOWERS**.



Mistral super mentors, who are a true embodiment of Mistral's values, will guide you through the entire adventure day in and day out.

WHAT ARE YOUR CORE SKILLS AND VALUES?

Let's find out and put them to use in creating the web a better place.

WHAT AM I GETTING MYSELF INTO

So;

- **Mistral** super mentors run **Gigi School of Coding**.

They also do serious business on their projects and are crucial members of their teams. Every mentor brings a different piece of pie to the table, but what they all have in common is that they are experts of their fields (**Development, UI/UX Design, Project Management, Quality Assurance, English Language and Soft Skills**).



GIGI SCHOOL OF CODING

goes on for 3 months, full-time, and gives you an opportunity to learn about the whole development process from every angle, preparing you for the big teams and projects you will face later on in your career. You will basically work in an original Mistral environment on simulated Mistral projects in groups of 3 or 4. The role you will have on your team depends on the area you are most interested in.

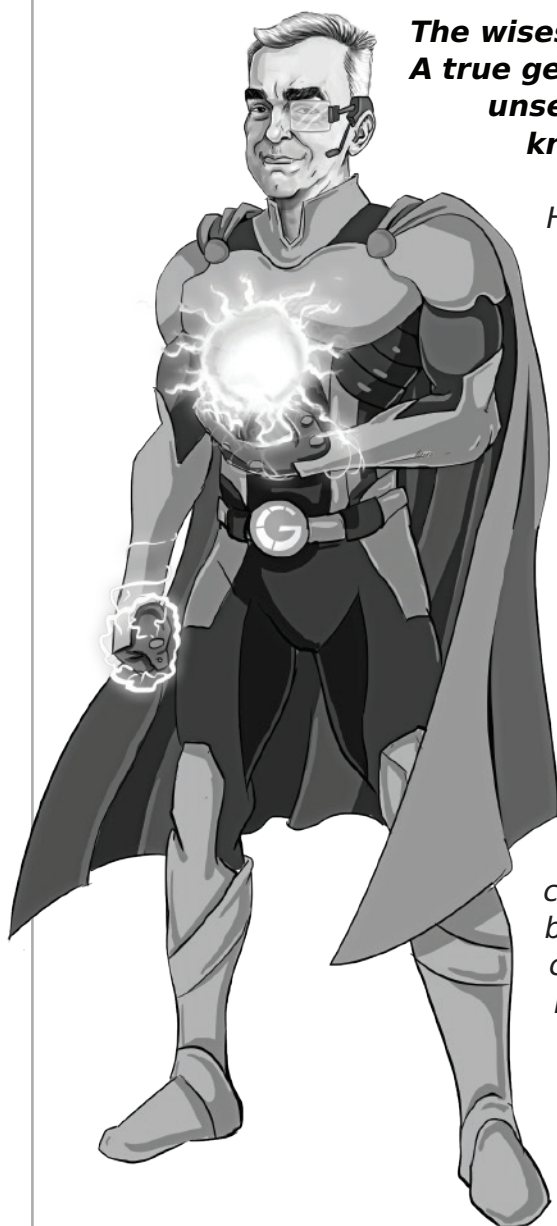
GIGI SCHOOL OF CODING
START DATE: 15. 01. 2018.

THE GIGI LEAGUE ASSEMBLY

THE GENERAL SUPREME

Sulejman Ćatibušić

HEAD OF EDUCATION



The wisest of them all.

A true gentleman with electric and unseizable power of transferring knowledge and positive energy.

He is the legendary Gigi. Luigi (Gigi) Riva, an Italian football representation leftwinger was an inspiration for Sulejman's nickname. He was an awesome footballer back in the day. However, his love of tech and the quest for technical excellence is what remained consistent throughout his life.

Gigi's background is a combination of experience in the education and industry sectors, the perfect mix that enabled him to have a nose for what direction we should be heading in! His CV probably contains a minimum of 10 pages, but his knowledge could easily be compared with a "Wikipedia for Developers"! Be prepared to be cherished, supported and challenged by our true
Number 1 in Education.

MADAM SERENE

Mila Gračanin

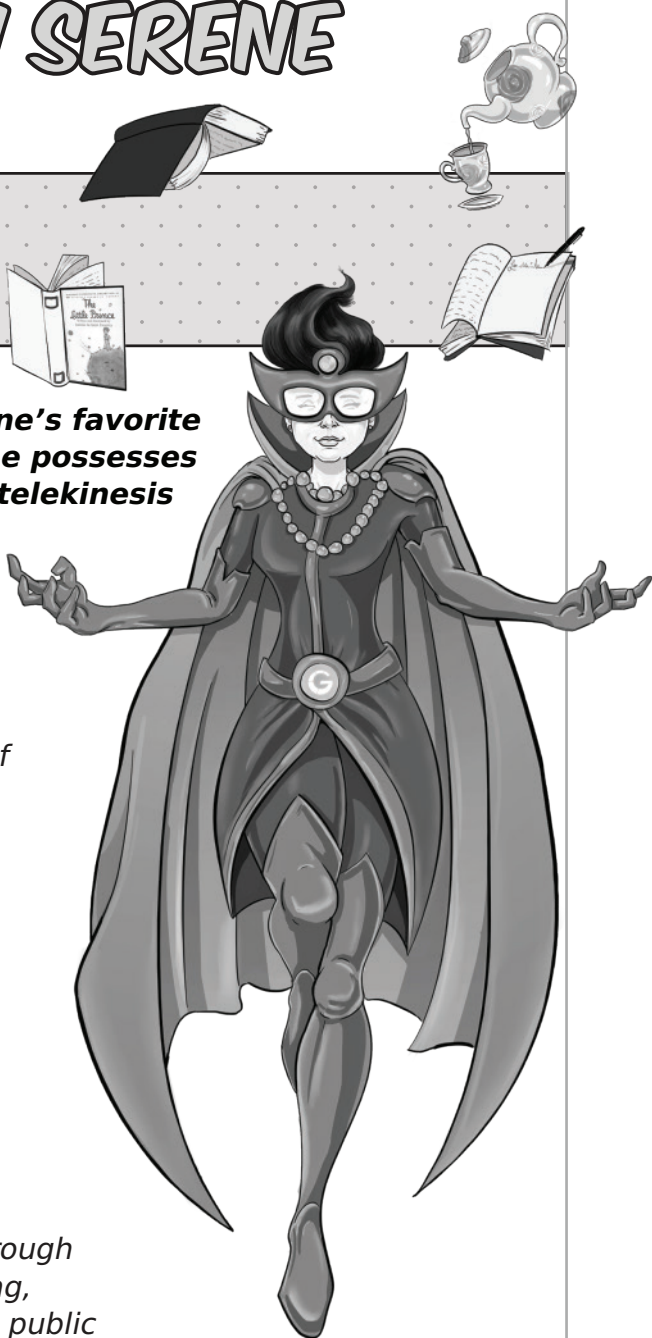
ENGLISH LANGUAGE TEACHER

The soul of the team. Everyone's favorite introvert. Some would say she possesses the powers of telepathy and telekinesis because of the way she understands people and moves them with her kindness.

*She loves a good joke, books, chocolate and ... well, all kinds of **chocolate**. You may spot her riding a fine lady vintage style bike, or cruising along the town streets in her MINI. She LOVES yoga and pushing the limits, meeting new interesting people, and learning with them.*

Developing learners' communicative competence is her main responsibility and her forte!

With her, you will be learning through engagement in thought provoking, motivation checking, impromptu public speaking and mini presentations, role playing, mock conference (Skype) calls, etc. She will also give you useful performance feedback on a daily basis!



PROFFESOR LIFEHACK

Amel Musić
SENIOR DEVELOPER



The multit talented genius, the joker, the one who learns at the speed of light. The capacity of his brain is still an unknown phenomenon to science. This mental power can sometimes be overwhelming to common folks.



Everything you imagined a **true developer** should be, that's him. And much more. Amel may look young, but he carries an enviable, over a decade long experience in designing and implementing systems that handles TB's of data and millions of transactions. He is eager to share that knowledge with you. Amel is very passionate about IT, a "fresh out of the oven" father who enjoys hiking and traveling and has only one weakness: Roast lamb! Resisting roast lamb is the only task he fails at.

*Amel has an awesome ability to connect many complex concepts into one clear example, making everything easy to comprehend, especially best practices and design patterns that he will be talking about the most during the internship. Specific for him are also his **epic sense of humor** and never-ending optimism.*

CAPTAIN AGILE

Aldin Selimović
PROJECT MANAGER

Fitness perfection and the highest level of adaptability. This mentor makes everything seem easy-peasy, organized and smooth. His broad shoulders are equipped to carry around a ton of emotional baggage and team problems that he later turns into positive experiences.

Aldin is not your ordinary project manager. He is a person who likes to read, explore and make things run smoother. He doesn't like to hang out "na kafi" and waste time on gossip.

Agile, management, crypto, entrepreneurship and leadership are the topics that interest him the most.

He will try to teach you not only the basic principles of agile and project management but the management in general, leadership, how teams work, how individuals work - well, how they should work.

*Aldin will show you that it's totally OK to FAIL (**First Attempt In Learning**). He will try to expand your horizons and make you think. You are very welcome to make him think too! He loves to be challenged. All that while having fun.*

A LOT OF FUN.



DOCTOR VISION

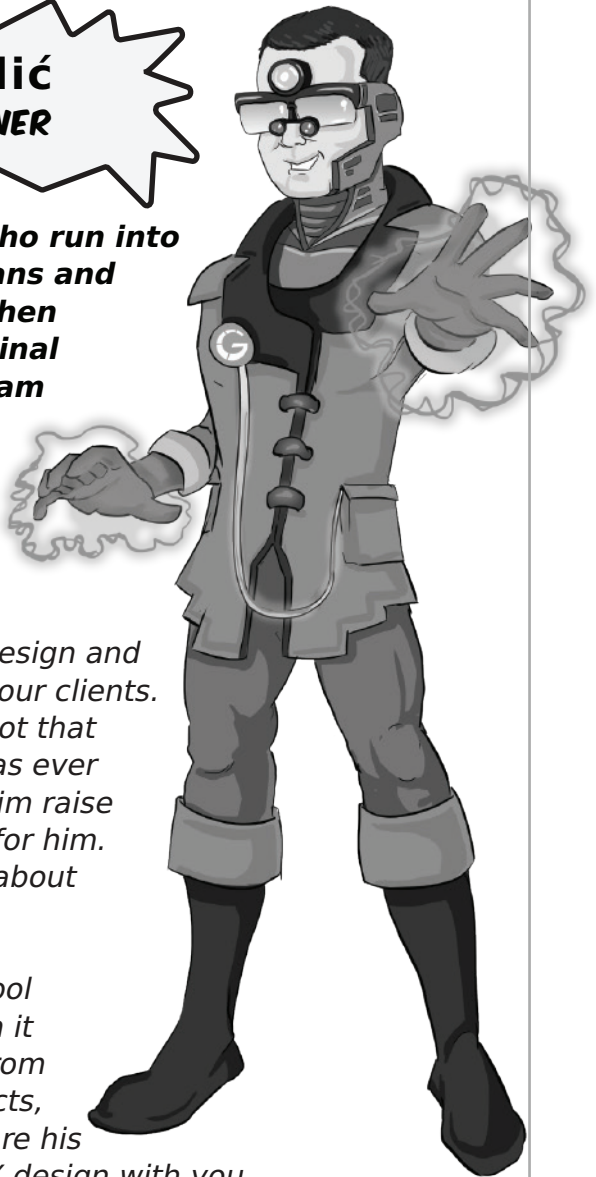
Benjamin Delić
SENIOR UI/UX DESIGNER

There are those superheroes who run into flaming buildings, rescue civilians and pose adoringly for their fans. Then there is Doctor Vision. The original architect, the unreplaceable team member. Mysterious innature, creative by design.

***HIS CAPABILITIES ARE
SIMPLY HYPNOTIZING.***

He does the most amazing UI/UX design and his work is admired by so many of our clients. He is actually always super busy, not that you'd know that because no one has ever seen Benjamin stressed or heard him raise his voice. No task is ever too hard for him. Unless the task includes speaking about himself. Then it's hard one!

The reason he is part of Gigi's School of Coding is because he insisted on it (and we love him for that). Apart from working full time on Mistral's projects, Benjamin dedicates his time to share his knowledge of HTML, CSS and UI/UX design with you.



MENTOR X – QUALITY ASSURANCE BUGBUSTER

The quality of this Gigi School of Coding cycle will be assured by all mentors, but to ensure the code we produce together is of the highest standard, one of our senior QA engineers will be joining the Gigi League.

WHO WILL IT BE IS YET TO BE DETERMINED...



FOR THE FIRST TIME EVER, MISTRAL PRESENTS: TECHNICAL TEST EXAMPLE QUESTIONS

- BECAUSE BEING PREPARED IS HALF THE WORK! -

PART 1

Read the passage and answer the questions
SATURDAY WITH GRANDPA

Saturday is our day to clean, but Grandpa turns work into fun. We like to sing when we dust. We like to dance when we mop. We clean the car together. We do the wash together. We both wear our caps. When we are done, we hurry to the store. We shop for food. Grandpa lets me pick the fruits that I like best. We carry the food home. Grandpa tells stories while we walk. At night, our work is done. Friends come over. We cook dinner. We sing and dance. Saturday is our day to clean, but Grandpa turns work into fun!

What happens in ***"SATURDAY WITH GRANDPA"***?

- a) A boy and his grandpa eat hot dogs.
- b) A boy and his grandpa clean together.
- c) A boy and his grandpa ride in a car.
- d) A boy and his grandpa go to the beach.

What do the boy and his grandpa both wear while they clean?

- a) mops
- b) aprons
- c) caps
- d) scarves

Read this sentence from the story: When we are done, we hurry to the store. What does ***HURRY*** mean?

- a) walk
- b) skip
- c) hop
- d) rush

PART 2

LOGICAL REASONING

1. Eileen is planning a special birthday dinner for her husband's 35th birthday. She wants the evening to be memorable, but her husband is a simple man who would rather be in jeans at a baseball game than in a suit at a fancy restaurant. Which restaurant below should Eileen choose?
 - a) Alfredo's offers fine Italian cuisine and an elegant Tuscan decor. Patrons will feel as though they've spent the evening in a luxurious Italian villa.
 - b) Pancho's Mexican Buffet is an all-you-can-eat family style smorgasbord with the best tacos in town.
 - c) The Parisian Bistro is a four-star French restaurant where guests are treated like royalty. Chef Dilbert Olay is famous for his beef bourguignon
 - d) Marty's serves delicious, hearty meals in a charming setting reminiscent of a baseball clubhouse in honor of the owner, Marty Lester, a former major league baseball all-star.
2. The film director wants an actress for the lead role of Lucy who perfectly fits the description that appears in the original screenplay. He is not willing to consider actresses who do not resemble the character as she is described in the screenplay, no matter how talented they are. The screenplay describes Lucy as an average-sized, forty something redhead, with deep brown eyes, very fair skin, and a brilliant smile. The casting agent has four actresses in mind.

Actress #1 is a stunning red-haired beauty who is 5'9" and in her mid-twenties. Her eyes are brown and she has an olive complexion.

Actress #2 has red hair, big brown eyes, and a fair complexion. She is in her mid-forties and is 5'5".

Actress #3 is 5'4" and of medium build. She has red hair, brown eyes, and is in her early forties.

Actress #4 is a blue-eyed redhead in her early thirties. She's of very slight build and stands at 5'.

A. 1, 2

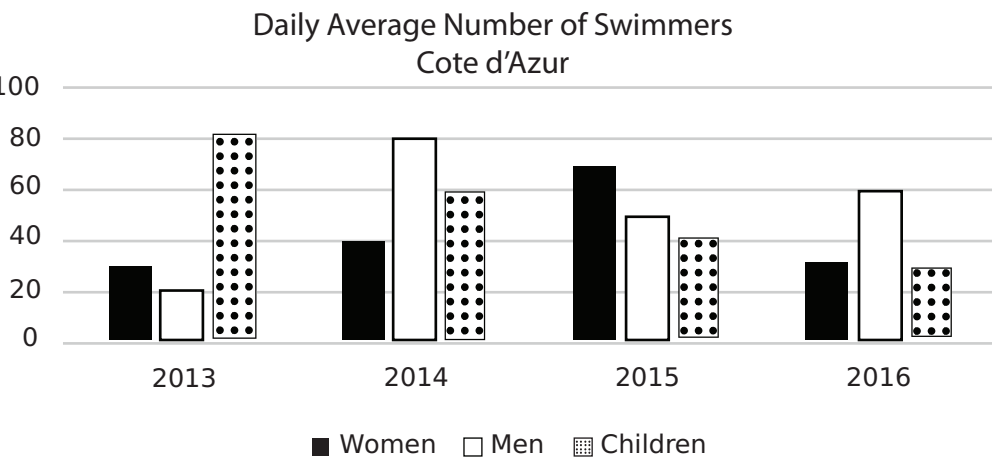
B. 2, 3

C. 1, 4

D. 2, 4

3. The school principal has received complaints from parents about bullying in the school yard during recess. He wants to investigate and end this situation as soon as possible, so he has asked the recess aides to watch closely. Which situation should the recess aides report to the principal?
- a) A girl is sitting glumly on a bench reading a book and not interacting with her peers.
 - b) Four girls are surrounding another girl and seem to have possession of her backpack.
 - c) Two boys are playing a one-on-one game of basketball and are arguing over the last basket scored.
 - d) Three boys are huddled over a handheld video game, which isn't supposed to be on school grounds.

PART 3
NUMERICAL TEST



1. In which year was the average number of daily swimmers the highest?
- A:** 2013 **B:** 2014 **C:** 2015 **D:** 2016
2. Assuming the children group is 50% boys and 50% girls, how many more males swam at Cote d'Azur in 2006 than in 2005?
- A:** 35 **B:** 45 **C:** 10 **D:** 5

3. Which share had the largest difference between highest and lowest price over the last 12 months?

SHARE PRICE INDEX

Company	Today's Price (€)	Change from previous day (€)	Past 12 months	
			Maximum price(€)	Minimum price(€)
Huver Co.	1,150	1.10	1,360	860
Drebs Ltd	18	0.50	22	11
Fevs Plc	1,586	-9.00	1,955	1,242
Fauvers	507	-1.00	724	464
Steapars	2,537	1.00	2,630	2,216

A. Huver Co.

B. Drebs Ltd

C. Fevs Pls

D. Fauvers

E. Steapars

DIVIDEND INDEX

Dividend paid per share (€)	Huver Co.	Drebs Ltd	Fevs Plc	Fauvers	Steapars
Interim Dividend	0.83	0.44	0.34	0.09	0.48
Final Dividend	1.75	1.12	1.25	0.32	0.96

NOTE: the total annual dividend paid per share is the sum of the interim dividend and the final dividend.

PART 4
CRACKING THE CODE

1. Implement a method to perform basic string compression using the counts of repeated characters. For example, string would become a2b1c4a3

2. How are errors handled in JavaScript?

3. What is the difference between == and === (two equal signs VS three equal signs) ?

4. What is constructor?

5. Explain the logging?

Part 1: Read the passage and answer the questions

How They Grow

How does a butterfly grow? It starts out as a tiny egg. It becomes a caterpillar. It eats lots of leaves. It grows and grows. Then it goes inside a cocoon. At last, it comes out. It's a butterfly!

How does a frog grow? It starts out as a tiny egg in the water. The egg grows into a tadpole. It keeps changing. It eats tiny plants. It grows and grows. At last, it hops out of the pond. It's a frog!

How does a flower grow? It starts out as a seed. Sun and rain help the seed grow. Roots grow into the ground. The plant grows and grows. At last, a bud opens. It's a flower!

Now you know how they grow!

What do you think the butterfly will do next?

- a) fly away
- b) turn into a frog
- c) sing a song
- d) swim in the water

Where does a tadpole live?

- a) in a tree
- b) under a rock
- c) in the sky
- d) in the water

Read this sentence from the story: At last, it hops out of the pond. What does hops mean?

- a) runs
- b) jumps
- c) falls
- d) swims

Part 2: *Logical reasoning*

1. One train runs from point A to point B at 105 mph, the other runs from B to A at 85 mph. How far apart were the two trains 30 minutes prior to their crossing?

2. Mrs. Carson took a taxi to meet her three friends for lunch. They were waiting for her outside the restaurant when she pulled up in the car. She was so excited to see her friends that she left her tote bag in the taxi. As the taxi pulled away, she and her friends took notice of the license plate number so they would be able to identify the car when they called the taxi company.

#1: The four women seem to agree that the plate starts out with the letter J.

#2: Three of them agree that the plate ends with 12L.

#3: Three of them think that the second letter is X, and a different three think that the third letter is K.

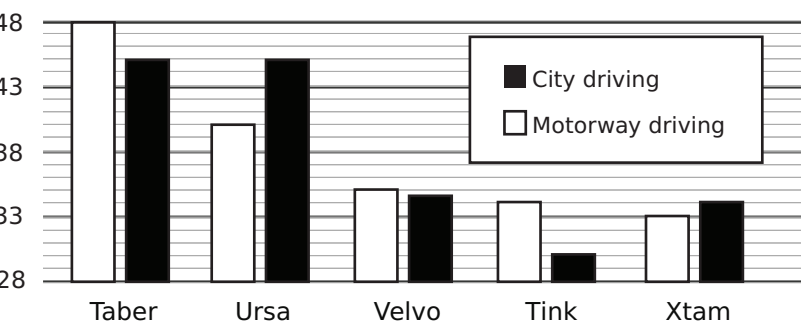
The four license plate numbers below represent what each of the four women thinks she saw. Which one is most likely the license plate number of the taxi?

- A.**JXK 12L **B.**JYK 12L **C.**JXK 12I **D.**JXX 12L

- 3.** Mark is working with a realtor to find a location for the toy store he plans to open in his town. He is looking for a place that is either in, or not too far from, the center of town and one that would attract the right kind of foot traffic. Which of the following locations should Mark's realtor call to his attention?
- a)** a storefront in a new high-rise building near the train station in the center of town whose occupants are mainly young, childless professionals who use the train to commute to their offices each day.
 - b)** a little shop three blocks away from the town's main street, located across the street from an elementary school and next door to an ice cream store
 - c)** a stand-alone storefront on a quiet residential street ten blocks away from the town's center
 - d)** a storefront in a small strip mall located on the outskirts of town that is also occupied by a pharmacy and a dry cleaner

Part 3: Numerical Test

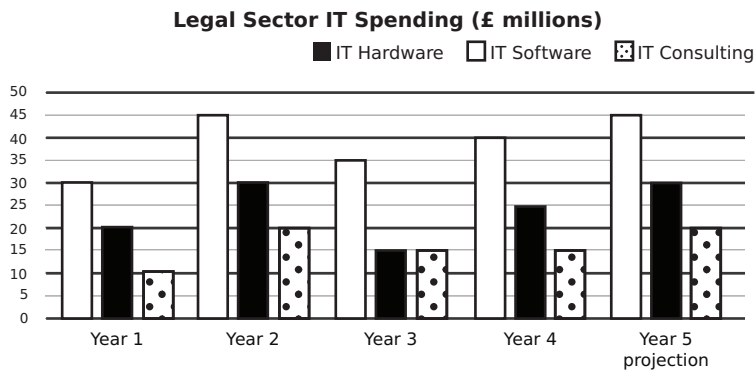
- 1.** A field sales agent plans to travel on average 4,250 miles per month driving along motorways in her Xtam car. What is her projected average annual consumption of fuel (in gallons)?



- A.** 1.500
- B.** 125
- C.** 150
- D.** 1.250

Car	Max.Speed (mph)	Cost to purchase (£)
Taber	65	12,500
Ursa	60	15,250
Velvo	125	37,500
Tink	95	55,250
Xtam	110	62,500

2. Legal sector spending on IT hardware, IT software and IT consulting are all set to increase by the same amounts in Year 6 as they did from Year 4 to Year 5. Assuming this is the case, what is the total legal sector spend in Year 6 on these three IT areas combined?



- A. \$75 million
- B. \$85 million
- C. \$95 million
- D. \$105 million
- E. \$110 million

Two Legal Sector IT Firms Income for Consultancy Services (10,000s)

Year	Make Fit Ltd	Pure Gap Plc
Year 1	290	230
Year 2	180	310
Year 3	260	300
Year 4	320	290

3. If actual labor costs rise so as to halve their discrepancy against the target, what will be the change in actual Gross Profit?

January’s Sales Turnover and Profit

IKE Computers (January)	Actual (£)	Targe (£)
Sales Turnover	277,350	325,000
Sales Tax (14%)	38,829	45,500
Net Turnover	238,521	279,500
Labour Costs	166,000	175,000
Other Costs	36,000	41,000
Gross Profit	36,521	63,500

- A. Falls by 4.500
- B. Rises by 4.500
- C. No overall effect
- D. Rises by 9.000
- E. Falls by 9.000

Part 4: Cracking the Code

1. Make a function to sum first N natural numbers using recursion
2. How to inherit a class into other class in C#?
3. What is the output of $10 + 20 + "30"$ in JavaScript?
4. Can a private virtual method can be overridden?
5. What is code review?

Part 1: Read the passage and answer the questions

Solar Energy

In the past, home heating systems have been operated using different sources of energy such as wood, electricity, and kerosene.

But these are expensive when compared to a more recently developed source - solar energy. Solar energy is an alternative, but its application for heating is limited to a small numbers of appliances.

There is also the difficulty of obtaining solar energy for heating purposes in the winter time when it is most needed and its major resource, the sun, is hardly effective.

Solar energy is hardly available in the winter.

True

False

Cannot say

The use of solar energy for heating is restricted to a few heating devices.

True

False

Cannot say

There are other major resources that can be used to provide solar energy instead of the sun.

True

False

Cannot say

Part 2: Logical reasoning

1. Zachary has invited his three buddies over to watch the basketball game on his wide-screen television. They are all hungry, but no one wants to leave to get food. Just as they are arguing about who should make the food run, a commercial comes on for a local pizzeria that delivers. The phone number flashes on the screen briefly and they all try to remember it. By the time Zachary grabs a pen and paper, each of them recollects a different number.

#1: All of the men agree that the first three numbers are 995.

#2: Three of them agree that the fourth number is 9.

#3: Three agree that the fifth number is 2.

#4: Three agree that the sixth number is 6; three others agree that the seventh number is also 6.

Which of the numbers is most likely the telephone number of the pizzeria?

A.995-9266 **B.**995-9336 **C.**995-9268 **D.**995-8266

2. Rita, an accomplished pastry chef who is well known for her artistic and exquisite wedding cakes, opened a bakery one year ago and is surprised that business has been so slow. A consultant she hired to conduct market research has reported that the local population doesn't think of her shop as one they would visit on a daily basis but rather a place they'd visit if they were celebrating a special occasion. Which of the following strategies should Rita employ to increase her daily business?

a) making coupons available that entitle the coupon holder to receive a 25% discount on wedding, anniversary, or birthday cakes

b) exhibiting at the next Bridal Expo and having pieces of one of her wedding cakes available for tasting

c) placing a series of ads in the local newspaper that advertise the wide array of breads

d) moving the bakery to the other side of town

3. Three spies, suspected as double agents, speak as follows, and in this sequence, when questioned:

a) Albert: Bertie is a mole

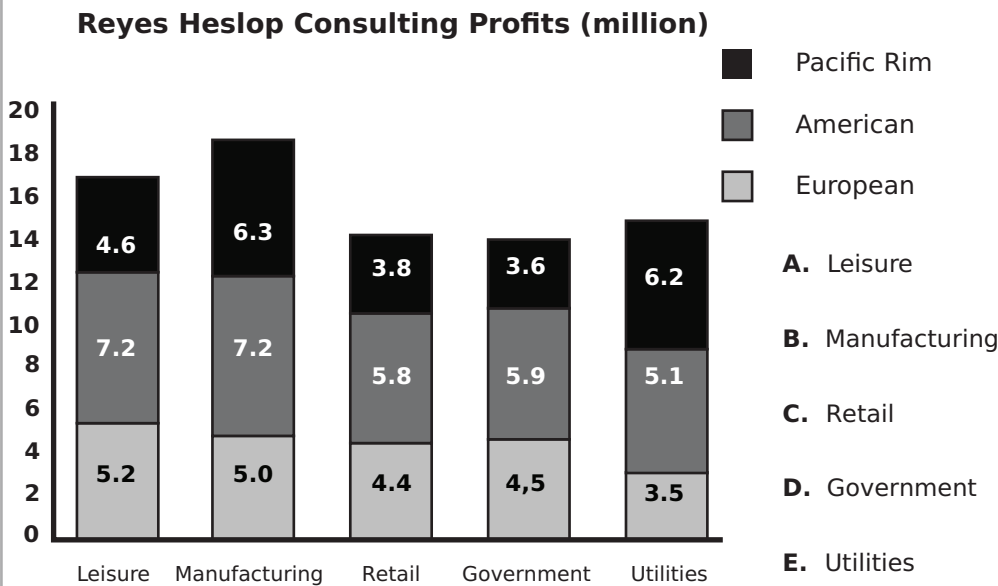
b) Bertie: Cedric is a mole

c) Cedric: Bertie is lying

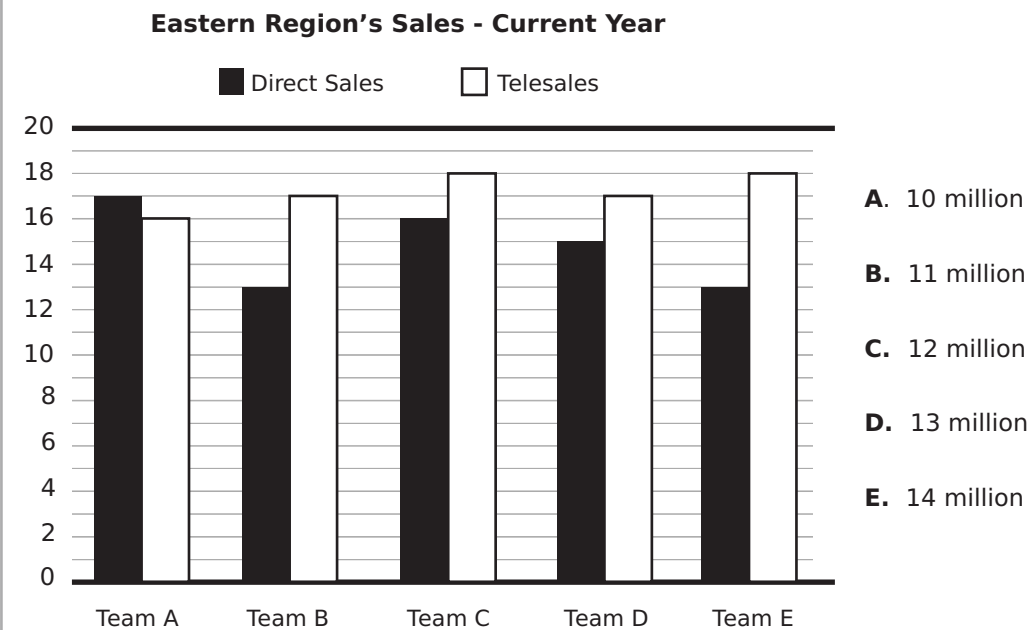
Assuming that moles lie, other agents tell the truth, and there is just one mole among the three, determine who is the mole.

Part 3: Numerical Test

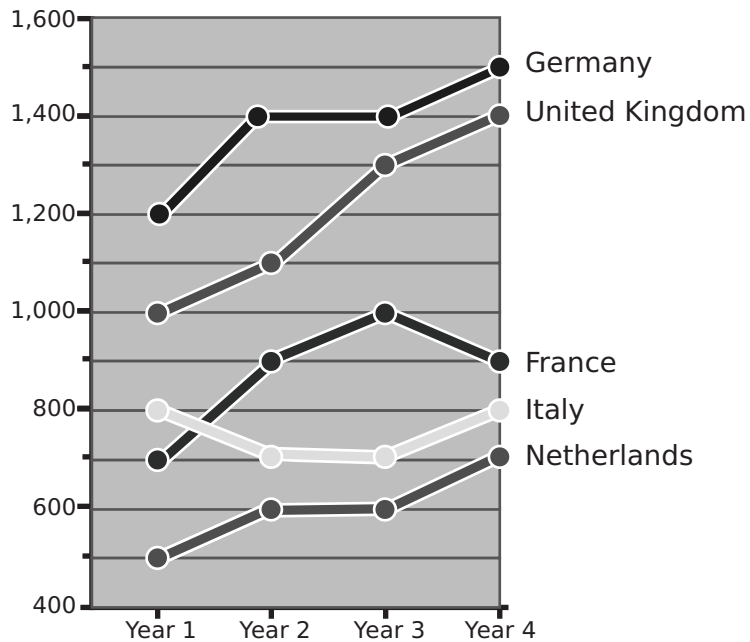
1. Which sector represents approximately 19% of the profits from the five sectors shown?



2. What is the difference between direct sales and telesales across the five teams combined?



3. In year 3, how much more than Italy did Germany spend on computer imports?



A: 1.080 mln **B:** 1.120 mln **C:** 1.160 mln **D:** 1.220 mln **E:** 1.300 million

Part 4: Cracking the Code

1. Write function to swap a number in place (without temporary variables)

2. What will the browser console show?

```
var text = 'outside';  
function logIt() {  
  console.log(text);  
  var text = 'inside';  
}  
logIt();
```

3. What is method overloading?

4. What are mock-ups?

5. What is denormalization? Explain the pros and cons.



GIGI LEAGUE OF MENTORS



APPLY ON
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