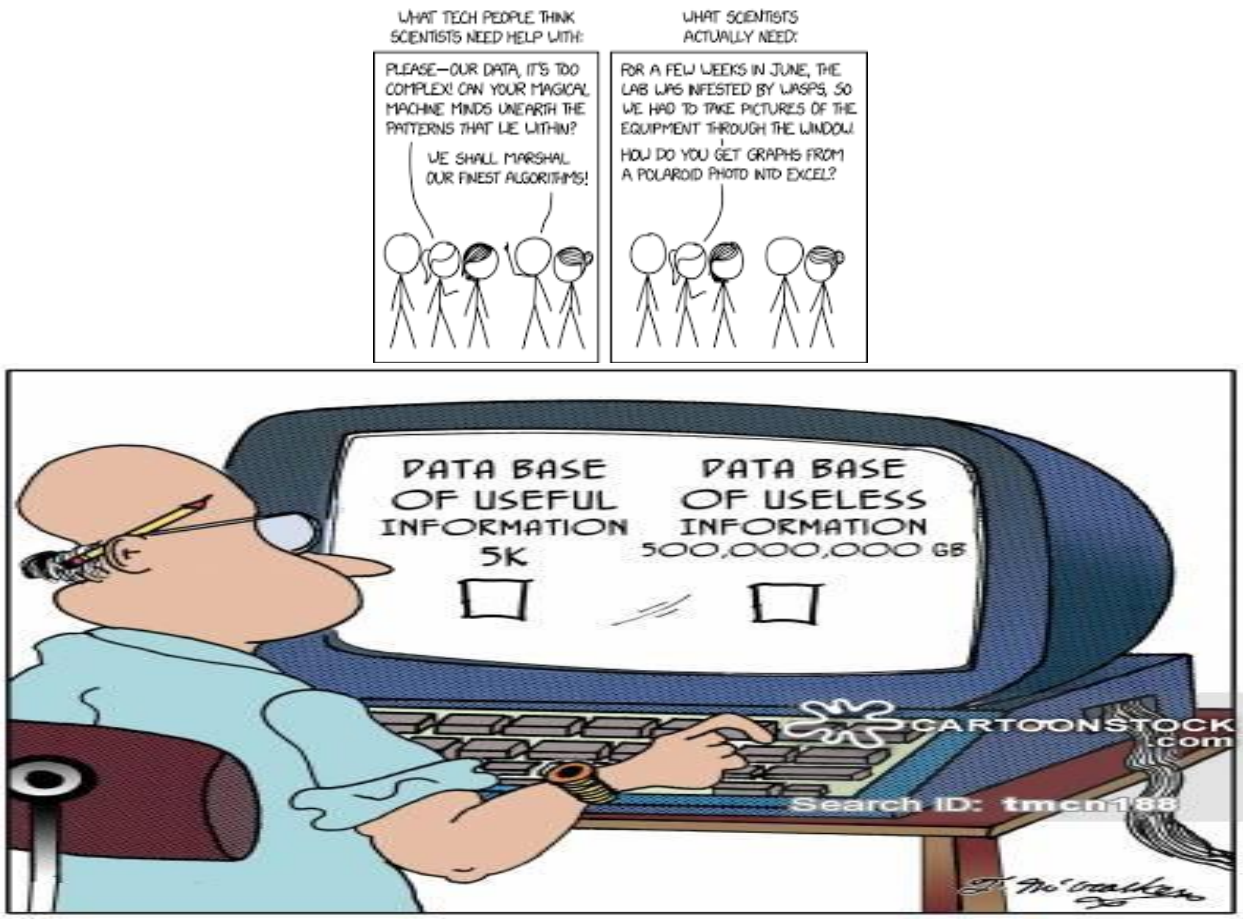
COMPUTER SCIENCE MASTER 1



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Master Informatique : 3 ECTS, Niveau B

a) Objectifs :

Apprentissage et «rebrassage» du lexique relatif à l'informatique : noms, verbes, adverbes, abréviations..etc. Sensibilisation des étudiants à la spécificité de l'anglais scientifique (dualité de l'anglais : germanique & Co /latin) par la biais de la lecture et de l'analyse d'articles issus de la presse scientifique.
Rappel de la grammaire et notamment des faits de langue récurrents dans la communication scientifique en Anglais.
Entrainement à la prise de parole en continu (exigence du Portefeuille Européen des Langues, niveau B2).

b) **Contenus :**

- Reading comprehension : Textes extraits de la presse Anglo-Saxonne (*Popular Science, Scientific American, CNN, The New Scientist, Time, The Guardian, The New York Times..etc*), Lecture et compréhension globales, analyse, discussion et élargissement (expression écrite).

- Listening comprehension : à partir d'enregistrements issus de *NPR, CNN, VOICE OF AMERICA* , *BBC*…etc.
- Speaking : Présentation orale en binôme (en pair-work) sur un sujet scientifique ayant des implications sociales/sociétales ou économiques. Présentation à l'aide de supports visuels (PowerPoint) ou audio-visuels sans lecture de notes et suivie par un débat entre étudiants.

c) **Prérequis:**

Il est procédé à un test de positionnement au début du module afin de constituer des groupes de niveaux. Les objectifs et les contenus peuvent donc être revus, étoffés ou simplifier en fonction du niveau des étudiants. (voir ***Groupes de niveaux***)

d) Groupes de niveau et notation

Les groupes de TD sont établis en fonction du niveau des étudiants tel qu'il a été constaté lors du test de positionnement*. **Les groupes de niveau sont un mode de fonctionnement, et non un mode d'évaluation.** Ils permettent à chacun de s'exprimer plus facilement en anglais et à l'enseignant d'adapter le contenu et le rythme des TD à ses étudiants. En revanche, **la notation et le niveau final attendu sont les mêmes pour tous, puisqu'indépendamment** du niveau du groupe, tous les étudiants prétendent à la validation d'une seule et même U. E. C'est le niveau en langue étrangère évalué par l'ensemble des travaux écrits ou oraux effectués dans le cadre du TD qui justifie la note obtenue à l'U. E. de langue, quel que soit le niveau du groupe. **Le niveau requis pour l'obtention de la moyenne en master est le niveau B2 du CERCL, y compris pour les notes de contrôle continu.**
Les notes de contrôle continu ne sont définitives qu'après approbation et harmonisation par le coordinateur.

e) Modalités de l'évaluation

- **Travail de contrôle continu dans les groupes** : 20% (au moins 2 travaux écrits faits en classe, dont un essai.
- **Exposé à caractère scientifique** : 20%

- **Contrôle final commun** : 60% (compréhension écrite et expression écrite sur 20, compréhension orale sur 20, essai sur 10). Les copies doivent être anonymes et réparties entre les différents enseignants de manière aléatoire.
On peut inclure 5% pour la participation. Il est exclu d'inclure dans cette note des exercices de grammaire ou de révision élémentaires. Il convient également d'éviter d'y inclure des devoirs faits à la maison.

f) Politique des absences

La présence en cours est obligatoire. Toute absence, non justifiée **officiellement**, donne lieu à une baisse de la note de contrôle continu. **À la troisième absence, avec ou sans justificatifs, l'étudiant est exclu du contrôle continu et obtient la note de 0/40.**

g) Evaluation des exposés

0 à 5 : Plagiat. Le message ne passe pas. L'exposé est incompréhensible ou quasi incompréhensible. L'étudiant lit ses notes de manière systématique. Les diapos présentent un texte rédigé que l'étudiant lit. Niveau A1-A2 du CERCL. Sujet non scientifique ou traité de manière superficielle.

5 à 10 : Les consignes minimales sont respectées (ne lit pas ses notes, sujet scientifique acceptable). Niveau B1 avec des fautes nombreuses et systématiques. Le message ne passe pas toujours. Le traitement du sujet est incomplet ou insuffisant. Le travail de préparation n'est pas suffisant (recherche des mots clés etc.)

10 à 15 : Niveau B2 du CERCL. Peu de fautes ou fautes non systématiques. Le message passe presque toujours. Sujet bien problématisé, traité avec plus ou moins de richesse. Travail de préparation satisfaisant.

15 et plus: Niveau C1 du CERCL. Présentation parfaite. Très bonne maîtrise de la langue de spécialité. Fautes rares ou assez rares. Sujet traité avec finesse et richesse. Travail de préparation très conséquent et très bénéfique.

h) Dispense :

La dispense est accordée aux locuteurs natifs ainsi qu'aux étudiants parfaitement bilingue (au moins C 1). La demande est faite auprès du Responsable des Etudes M. J. AIT MOUHOUCHT, jamal.ait_mouhoucht@sorbonne-universite.fr qui , après instruction de la demande (vérification, entretien..etc) prend la décision et en informe l'étudiant demandeur.

Course Calendar

23/09
30/09
07/10
14/10
21/10
28/10
04/11 no class
11/11
18/11 no class
25/11
02/12
09/12 final exam

ICEBREAKER : DESERT SURVIVAL TEST

Introduction

This is a problem to be solved by groups of 5-8 people. The situation described is based on over 2,000 actual cases in which men or women lived or died depending on the survival decisions they made. Your own 'life' or 'death' will depend on how well your group can share its knowledge to reach decisions.

The situation

It is approximately 10.00 am in mid-July and you have just crash-landed in the Sonora Desert, South West USA. Your light twin-engined plane containing the bodies of the pilot and co- pilot have completely burnt out, only the frame remaining. None of the rest of you has been injured.

The pilot was unable to notify anyone of your position before you crashed. However, ground sightings taken shortly before the crash suggested that you are about 65 miles off-course from your originally filed flight plan. A few moments before the crash the pilot indicated that the nearest known habitation was a mining camp 70 miles away in a North North-East direction.

The immediate area is quite flat and appears to be rather barren except for the occasional cactus. The last weather report indicated that the temperature would reach 110°F (43°C).

You are dressed in light-weight clothing -short-sleeved shirts, shorts, socks and leather shoes. Everyone has a handkerchief. Collectively your pockets contain $1.25 in change, $81 in notes, a packet of cigarettes and a ball-point pen.

The problem

Before the plane caught fire, your group was able to salvage the 15 items listed on the next page

1. As an individual, rank these items in order importance for your survival, starting with 1' for the most important down to 15' for the least important. You may assume that the number of survivors is the same as the number of members in your group and that they have decided to stick together. Write the numbers in the first column and do not discuss your ranking with anyone else at this stage.

2. Now get together with the other members of your group to discuss the problem and write down the numbers of the new order of importance (which you have agreed upon) in the second column.

Scoring

- Your teacher will give you the 'official' ranking.
- Compare the ranking which you as an individual gave each item and subtract the lower figure from the higher one. Write the difference in the column headed Individual Difference score.
- When you have finished, add up all the figures in that column and make a note of the total.
- Do the same for the ranking which your group decided, noting the difference in the column headed Group Difference Score and write down the total.
- Compare the two results. The lower figure represents the greater chance of survival. Which seems to have been effective – individual or group decision?

IETMS	Iindividual ranking	Group consensus ranking	Official ranking	Individual difference score	Group difference score
Torch (1battery size)					
Jack-knife					
Sectional air map of crash area					
Plastic rain coat					
Magnetic compass					
Bandage kit with gauze					
45 calibre pistol (loaded)					
Parachute (red and white)					
Bottle of salt tablets					
1 litere of water per person					
Book entitled "Edible animals of the desert"					
2 pairs of sunglasses per person					
2 quarts of 180 proof vodka					
1 overcoat per person					
Cosmetic mirror					
total					

MAKING A SUCCESSFUL PRESENTATION

Prepare the structure of the talk carefully and logically, just as you would for a written report. What are

- The objectives of the talk?
- The main points you want to make?

- Write out the presentation in rough, just like a first draft of a written report.

- Review the draft. You will find things that are irrelevant or superfluous – delete them, Check the story is consistent and flows smoothly. If there are things you cannot easily express, possibly because of doubt about your understanding, it is better to leave them unsaid.

- **Never read from a script**. It is also unwise to have the talk written out in detail as a prompt sheet - the chances are you will not locate the thing you want to say amongst all the other text. You should know most of what you want to say - **if you don't then you should not be giving the talk**! So prepare **cue cards** which have key words and phrases. Make sure your audience understands the words you use. Do not hesitate to ask them and why not define and write the difficult words on the whiteboard.

- Your slides should feature your outline and the guidelines that you will develop orally. Avoid wordiness.

- Rehearse your presentation - to yourself at first and then in front of your mate or partner. The initial rehearsal should consider how the words and the sequence of visual aids go together. How will you make effective use of your visual aids? AND synchronize as smoothly as possible with your partners. (Giving the lead)

Making the presentation

Greet the audience (your mates) informally, and tell them who you are.

Good presentations then follow this formula:

- Tell the audience what you are going to tell them,
- Then tell them,
- At the end tell them what you have told them.

- Keep to the time allowed. If you can, keep it short. It's better to under-run than over-run. As a rule of thumb, allow 2 minutes for each Powerpoint slide you use, but longer for any that you want to use for developing specific points. Slides are generally used rnore sparingly and stay on the screen longer. However, the audience will get bored with something on the screen for more than 5 minutes, especially if you are not actively talking about it.
- Remember! You should comment on and explain whatever is showed on the slide: graphs, photographs..etc
- Stick to the plan for the presentation, don’t be tempted to digress - you will eat up time and could end up in a dead-end with no escape !

-At the end of your presentation thank the audience and ask if there are any questions -).If questions are slow in coming, you can start things off by asking a question - so have one prepared.

Delivery

- Speak clearly. Don't shout or whisper

- Don't rush, or talk deliberately slowly. Be natural - although not conversational.

- Deliberately pause at key points - this has the effect of emphasizing the importance of a particular point you are making.

- Avoid jokes - always disastrous unless you are a natural expert

- To make the presentation interesting, change your delivery, but not too obviously, eg:

  - speed
  - pitch of voice

- Use your hands to emphasise points but don't indulge in too much hand waving. People can, over time, develop irritating habits.

- Look at the audience as much as possible, but don't fix on an individual.

- Pitch your presentation towards the back of the audience.

- Don't face the display screen and talk to it.

Other annoying habits include:

- Standing in a position where you obscure the screen. In fact, positively check for anyone in the audience who may be disadvantaged and try to accommodate them.

- Avoid moving about too much. Pacing up and down can unnerve the audience, although some animation is desirable.

- Keep an eye on the audience's body language. Know when to stop and also when to cut out a piece of the presentation.

Visual Aids

Visual aids significantly improve the interest of a presentation. However, they must be relevant to what you want to say. A careless design or use of a slide can simply get in the way of the presentation.

- If you need to use a slide twice, duplicate it. And always check your slides - for typographical errors, consistency of fonts and layout.

- S1ides should contain the minimum information necessary. To do otherwise risks making the slide unreadable or will divert your audience's attention so that they spend time reading the slide rather than listening to you.

- Use color on your slides but avoid orange and yellow which do not show up very well when projected. For text only, white or yellow on blue is pleasant to look at and easy to read.

Finally...,

Enjoy yourself. The audience will be on your side and want to hear what you have to say!

Reading comprehension : text 1

§1 On 4 May 2016, Jimmy Fallon, the host of The Tonight Show, appeared in a sketch dressed as Donald Trump, then the Republican presidential nominee. Wearing a blond wig and three coats of bronzer, he pretended to phone Barack Obama – played by Dion Flynn –to brag about his latest primary win in Indiana. Both men appeared side by side in split screen, facing the camera. Flynn's straight-man impression of Obama, particularly his **sooth**ing, expectant voice, was convincing, while Fallon played the exaggerated caricature that all of Trump's mimics – and the man himself – settle into.

§2 Three years later, on 5 March 2019, footage of the sketch was posted on the YouTube channel derpfakes under the title The Presidents. The first half of the clip shows the opening 10 seconds or so of the sketch as it originally **air**ed. Then the **footage** is replayed, except the faces of Fallon and Flynn have been transformed into, seemingly, the real Trump and Obama, delivering the same lines in the same voices, but with **features** rendered almost indistinguishable from those of the presidents.

§3 The video, uploaded to YouTube by the founder of derpfakes, a 28-year-old Englishman called James (he asked us not to use his surname), is a forgery created by a neural network, a type of "deep" machine-learning model that analyses video footage until it is able algorithmically to transpose the "skin" of one human face on to the movements of another – as if applying a latex mask. The result is known as a deepfake.

§4 James's video wasn't intended to fool anyone – it was, he says, created "purely for laughs". But the **lifelike** rendering of the presidents, along with thousands of similar deepfakes posted on the internet in the past two years, has alarmed many observers, who believe the technology could be used to disgrace politicians and even swing elections. Democracies appear to be gravely threatened by the speed at which disinformation can be created and spread via social media, where the incentive to share the most sensationalist content outweighs the incentive to perform the tiresome work of verification.

§5 Last month, a digitally altered video showing Nancy Pelosi, the speaker of the US House of Representatives, appearing to slur drunkenly through a speech was widely shared on Facebook and YouTube. According to The Daily Beast, the clip was first posted by Shawn Brooks, 34, a sports blogger and "Trump superfan" from New York, who uploaded the **doctor**ed footage to Facebook. Trump then posted the clip on Twitter with the caption: "PELOSI STAMMERS THROUGH NEWS CONFERENCE". The video was quickly **debunk**ed, but not before it had been viewed millions of times; the president did not delete his tweet, which at the time of writing has received nearly 98,000 likes. Facebook declined to take down the clip, qualifying its decision with the statement: "Once the video was fact-checked as false, we dramatically reduced its distribution."

§6 In response, a team including the artists Bill Posters and Daniel Howe two weeks ago posted a video on Instagram, in which Facebook founder Mark Zuckerberg boasts that he has "total control of billions of people's stolen data, all their secrets, their lives, their futures". The film formed part of an installation at the 2019 Sheffield Doc Fest earlier this month and was posted, the artists said, in an attempt "to interrogate the power of these new forms of computational propaganda". It was also a test of whether or not Facebook would allow the film to be distributed via its platforms – in this case, Instagram – when the content was damaging to the company's reputation. At the time of writing, the fake Zuckerberg video remains live. "We will treat this content the same way we treat all misinformation on Instagram," a spokesperson said. "If third-party factcheckers mark it as false, we will filter it."

§7 When James, whose day job is unrelated to technology, launched his channel in January 2018, most deepfakes had nothing to do with politics. Using publicly available software such as FakeApp, amateurs typically would transpose the faces of celebrity women on to those of pornographic actors. "The technology intrigued me, but the early uses didn't, so I tried my hand at something more wholesome," James says over online chat. He set his neural network the task of examining the face of Carrie Fisher, as she had appeared, aged 21, in the original Star Wars film, in order to transpose her into the 2016 sequel, Rogue One. James hoped to show how a desktop PC could produce special effects comparable with those that might cost a Hollywood studio tens of thousands of dollars in CGI work (proponents argue that deepfake technology has a variety of applications to offer film companies, potentially enabling automated dubbing and lip-syncing.) The resulting clip, in which 1977-era Fisher lands intact in the 2016 movie, was created "in the time it takes to watch an episode of The Simpsons", James says, and viewed thousands of times within a few days.

§8 The Star Wars clip helped to **kickstart** a community of meme-creating film fans around the world, who use deepfake technology to place actors in films in which they never appeared, often to comic or meaningful effect. A popular subgenre of deepfakes places Nicolas Cage into films such as Terminator 2 and The Sound Of Music, or recasts him as every character in Friends. One deepfake convincingly transposes Heath Ledger's The Joker into the actor's role in A Knight's Tale. In February, a video grafting the face of one of China's best-known actors, Yang Mi, into a 25-year-old Hong Kong television drama, The Legend Of The Condor Heroes, went viral, picking up an estimated 240m views before it was removed by Chinese authorities. Its creator wrote on the video-sharing platform Bilibili that he had made the video as a warning.

§9 Since then, deepfake technology has continued **to gain momentum**. In May, researchers at Samsung's AI lab in Moscow published "footage" of Marilyn Monroe, Salvador Dalí and the Mona Lisa, each clip generated from one still image. While it is still fairly easy to discern a deepfake from **genuine** footage, **foolproof** fabrications appear to be disconcertingly close. Recent electoral upsets have demonstrated the unprecedented power of political entities to microtarget individuals with news and content that confirms their biases. ***The incentive to use deepfakes to injure political opponents is great.***

§10 There is only one confirmed attempt by a political party to use a deepfake video to influence an election (although a deepfake may also have played a role in a political crisis in Gabon in December). In May 2018, a Flemish socialist party called sp.a posted a deepfake video to its Twitter and Facebook pages showing Trump appearing to taunt Belgium for remaining in the Paris climate agreement. The video, which remains on the party's social media, is a poor forgery: Trump's hair is curiously soft-focus, while his mouth moves with a Muppet-like elasticity. Indeed, the video concludes with Trump saying: "We all know that climate change is fake, just like this video," although this sentence alone is not subtitled in Flemish Dutch. (The party declined to comment, but a spokesperson previously told the site Politico that it commissioned the video to "draw attention to the necessity to act on climate change".)

§11 But James believes forgeries may have gone undetected. "The idea that deepfakes have already been used politically isn't so farfetched," he says. "It could be the case that deepfakes have already been widely used for propaganda."

§12 At a US Senate intelligence committee hearing in May last year, the Republican senator Marco Rubio warned that deepfakes would be used in "the next wave of attacks against America and western democracies". Rubio imagined a scenario in which a provocative clip could go viral on the eve of an election, before analysts were able to determine it was a fake. A report in the

Washington Times in December claimed that policy insiders and Democratic and Republican senators believe “the Russian president or other actors hostile to the US will rely on deepfakes to throw the 2020 presidential election cycle into chaos”.

§13 Some question the scale of this threat. Russell Brandom, policy editor at the Verge, the US tech news site, argued recently that deepfake propaganda is “a crisis that doesn’t exist”, while the New York Times has called deepfakes “emerging, long-range threats” that “pale in comparison” with established peddlers of political falsity, such as Fox News. But many experts disagree. Eileen Donahoe, the director of the Transatlantic Commission on Election Integrity (TCEI) and an adjunct professor at Stanford University, has been studying the deepfake threat to democracy for the past year. “There is little to no doubt that Russia’s digital disinformation conglomerate has people working on deepfakes,” she says. So far, the TCEI has not seen evidence that the Russians have tried to deploy deepfakes in a political context. “But that doesn’t mean it’s not coming, or that Russia-generated deepfakes haven’t already been tried elsewhere.”

§14 Those who seek to undermine democracy won’t be deterred by the law'

Ivan is a 33-year-old Russian programmer who, having earned a fortune in the video-game industry, is enjoying an extended sabbatical spent cycling, running and camping near where he lives, on the banks of the Volga. He is the creator of DeepFaceLab, one of the most popular pieces of software used by the public to create forged videos. Ivan, who claims to be an “ordinary programmer” and not a political activist, discovered the technology on Reddit in 2017. The software he used to create his first deepfake left a watermark on his video, which irritated him. After the creator of the software rejected a number of changes Ivan suggested, he decided to create his own program.

§15 In the past 12 months, DeepFaceLab’s popularity has brought Ivan numerous offers of work, including regular approaches from Chinese TV companies. “This is not interesting to me,” he says, via email. For Ivan, creating deepfake software is like solving an intellectual puzzle. Currently, DeepFaceLab can only replace the target’s face below the forehead. Ivan is working to get to the stage where an entire head can be grafted from one body to another. This will allow deepfake makers to assume “full control of another person”, he says, an evolutionary step that “all politicians fear like fire”. But while such technology exists behind closed doors, there is no source code in the public domain. (Ivan cites a 2018 presentation, Deep Video Portraits, delivered at a conference by Stanford researchers, as the gold standard towards which he is working.)

§16 The most sophisticated deepfakes require advanced machine-learning skills and their development is computationally intensive and expensive. One expert estimates the cost to be about £1,000 a day. For an amateur creating fake celebrity pornography, this is a major barrier to entry. But for a government or a well-funded political organisation, the cost is insignificant – and falling every month. Ivan flipflops in his assessment of the threat. “I do not think that so many stupid rulers… are capable of such complicated schemes as deepfakes,” he says. Then, when asked if politicians and journalists have overestimated the risk of deepfake propaganda, he says: “Did the gods overestimate the risk of giving people fire?”

22 June 2019 8:00am GMT www.theguardian.com **Simon Pa**

1- Identify and present the document : nature, source, date, author and subject matter..etc
(write a well-structured paragraph 50 words) ***4pts***

_____

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2- **Suggest a suitable title** :
1pt

_____

Exercises 3 & 4 (§1 to §9)

3- **Say whether following statment are Right or Wrong and provide justification by quoting relevant portions from the text**. ***R or W not circled = 0, lines unspecified= 0, relevant portion not quoted= 0 /5pts***

a- About 3 years ago, in the presence of TV cameras, Donald Trump then candidate called B. Obama to boast about his major win at a Republican ballot.

R / W

Quote_____

_____

_____

b- The fake video posted in early 2019 showed a conversation between Trump and Obama and the characters' features were 100% accurate and consistent with reality.

R / W

Quote_____

_____

_____

c- This technical achievement was made possible thanks to the use of latex masks.

R / W

Quote_____

_____

_____

d- The author initially made the video to sensitize people and raise awareness about the dangers of fake images when used for politiocal ends.

R / W

Quote_____

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e- About 6 months ago, a prominent figure of Congress was a victim of a video that went viral and that showed her under an unfavorable light.

R / W

Quote_____

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f- After the video was unmasked as fake, key social media players did not remove it from their networks.

R / W

Quote_____

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g- Subsequently, a deepfake video about Mark Zuckenberg was posted to force Facebook to take a stance on whether fake or altered images are allowed to stay up on the site.
R / W

Quote_____

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h- The video about Zuckenberg was removed.

R / W

Quote_____

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i- The young man who engineered the video starring Trump and Obama was excited by the deepfake technology as well as its early output.

R / W

Quote_____

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_____

j- Producing special effects thanks to neural networks is very costly

R / W

Quote_____

_____

_____

4- Match the following words/phrases with their equivalent:

Word / phrase from the text	Equivalent
1. soothe	A. intensify
2. air	B. trait, characteristic
3. footage	C. real
4. feature	D. relieve
5. lifelike	E. expose
6. doctor	F. broadcast
7. debunk	G. disclose
8. kickstart	H. resassure
9. gain momentum	I. images
10. genuine	J. alter

Mark your answers in the grid :

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.

Exercises 5 & 6 (§8 to §16)

5- Answer the following questions using your own words :

a- ''The incentive to use deepfakes to injure political opponents is great.''**(§9)**Reformulate or Explain

_____

_____

_____

_____

b- What shows that the fake video used by a Belgian political party was intended to manipulate the audience.

_____

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c- What did the Republican leader Mark Rubio express concern about ?

_____

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d- Explain the different stances presented in **§13** on deepfakes?

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f- Why does Ivan, the Russian programmer, compare deepfake technology and fire ?

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III- WRITING :

Write a well-structured essay on the following topic. Provide arguments and factual examples.
Target length 250-300 words

1- Have computer science and its associated technologies gone out of control and should the legislator set limits by drawing a red line ?

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_____*word count :* _____

READING COMPREHENSION : text 2

Residents living around Plaça del Sol joke that theirs is the only square where, despite the name, rain is preferable. Rain means fewer people gather to socialise and drink, reducing noise for the flats overlooking the square. Residents know this with considerable precision because they've developed a digital platform for measuring noise levels and mobilising action. I was told the joke by Remei, one of the residents who, with her 'citizen scientist' neighbours, are ***challengi***ng assumptions about Big Data and the Smart City.

The Smart City and data sovereignty

The Smart City is an ***alluring*** prospect for many city leaders. Even if you haven't heard of it, you may have already joined in by ***looki***ng ***up*** bus movements on your phone, accessing Council services online or learning about air contamination levels. By inserting sensors across city infrastructures and creating new data sources - including citizens via their mobile devices – Smart City managers can apply Big Data analysis to *monitor* and anticipate urban phenomena in new ways, and, so the argument goes, efficiently manage urban activity for the benefit of 'smart citizens'.

Barcelona has been a pioneering Smart City. The Council's business partners have been installing sensors and opening data platforms for years. Not everyone is comfortable with this technocratic turn. After ***Ada Colau was elected Mayor on a mandate of democratising the city and putting citizens centre-stage, digital policy has sought to go 'beyond the Smart City'***. Chief Technology Officer Francesca Bria is opening digital platforms to greater citizen participation and ***oversight***. Worried that the city's knowledge was being ceded to tech vendors, the Council now promotes technological sovereignty.

On the surface, the noise project in Plaça del Sol is an example of such sovereignty. It even ***feature***s in Council presentations. Look more deeply, however, and it becomes apparent that neighbourhood activists are really appropriating new technologies into the old-fashioned politics of community development.

Community developments

Plaça de Sol has always been a meeting place. But as the neighbourhood of Gràcia has changed, so the intensity and character of socialising in the square has altered. More bars, restaurants, hotels, tourists and youngsters have arrived, and Plaça del Sol's long-standing position as venue for large, noisy groups drinking late into the night has become more entrenched. For years, resident complaints to the Council fell on deaf ears. For the Council, Gràcia signified an open, welcoming city and leisure economy. Residents I spoke with were proud of their vibrant neighbourhood. But they recalled a more convivial square, with kids playing games and families and friends socialising. Visitors attracted by Gràcia's atmosphere also contributed to it, but residents in Plaça del Sol felt this had become a nuisance. It is a story familiar to many cities. Much urban politics turns on the negotiation of convivial uses of space.

What made Plaça del Sol stand out can be traced to a group of technology activists who got in touch with residents early in 2017. The activists were seeking participants in their project called Making Sense, which sought to resurrect a struggling 'Smart Citizen Kit' for environmental monitoring. The idea was to provide residents with the tools to measure noise levels, compare them with officially permissible levels, and reduce noise in the square. More than 40 neighbours signed up and installed 25 sensors on balconies and inside apartments.

The neighbours had what project coordinator Mara Balestrini from Ideas for Change calls

'a matter of concern'. The earlier Smart Citizen Kit had begun as a technological solution looking for a problem: a crowd-funded gadget for measuring pollution, whose data users could upload to a web-platform for comparison with information from other users. Early adopters found the technology trickier to install than developers had presumed. Even successful users stopped ***monitor***ing because there was little community purpose. A new approach was needed. Noise in Plaça del Sol provided a problem for this technology fix.

Through meetings and workshops residents learnt about noise monitoring, and, importantly, activists learnt how to make technology matter for residents. The noise data they generated, unsurprisingly, exceeded norms recommended by both the World Health Organisation and municipal guidelines. Residents were codifying something already known: their square is very noisy. However, in ***render***ing their experience into data, these citizen scientists could also compare their experience with official noise levels, refer to scientific studies about health impacts, and ***correlate*** levels to different activities in the square during the day and night.

The project decided to compare their square with other places in the city. At this point, they discovered the Council's Sentilo Smart City platform already included a noise monitor in their square. Officials had been monitoring noise but not publicising the open data.

Presented with citizen data, officials initially challenged the competence of resident monitoring, even though official data confirmed a noise problem. But as Rosa, one of the residents, said to me, "This is my data. They cannot deny it".

Thick data

Residents were learning that data is rarely neutral. The kinds of data gathered, the methods used, how it gets interpreted, what gets ***overlooked***, the context in which it is generated, and by whom, and what to do as a result, are all choices that shape the facts of a matter. ***For experts building Big Data city platforms, one sensor in one square is simply a data point. On the other side of that point, however, are residents connecting that data to life in all its richness in their square***. Anthropologist Clifford Geertz argued many years ago that situations can only be made meaningful through ***'thick description'***. Applied to the Smart City, this means data cannot really be explained and used without understanding the contexts in which it arises and gets used. Data can only mobilise people and change things when it becomes thick with social meaning.

Noise data in Plaça del Sol was becoming thick with social meaning. Collective data gathering proved more **potent** than decibel levels alone: it was simultaneously mobilising people into changing the situation. Noise was no longer an individual problem, but a collective issue. And it was no longer just noise. The data project arose through face-to-face meetings in a physical workshop space. Importantly, this meant that neighbours got to know one another better, and had reasons for discussing life in the square when they bumped into one another.

Attention turned to solutions. A citizen assembly convened in the square one weekend publicised the campaign and discuss ideas with passers-by. Some people wanted the local police to impose fines on noisy drinkers, whereas others were wary of heavy-handed approaches. Some suggested installing a children's playground. Architects helped locals examine material changes that could dampen sound.

The Council response has been cautious. New flowerbeds along one side of the square remove steps where groups used to sit and drink. Banners and community police officers remind people to respect the neighbourhood. The Council recently announced plans for a movable playground (whose occupation of the centre of the square can be removed for

events, like the Festa Major de Gràcia). Residents will be able to monitor how these interventions change noise in the square. Their demands confront an established leisure economy. As local councillor Robert Soro explained to me, convivial uses have also to address the interests of bar owners, public space managers, tourism, commerce, and others. Beyond economic issues are questions of rights to public space, young peoples' needs to socialise, neighbouring squares worried about displaced activity, the Council's vision for Gràcia, and of course, the residents suffering the noise.

The politics beneath Smart City platforms

For the Council, technology activists, and residents of Plaça del Sol, data alone cannot solve their issues. Data cannot transcend the lively and contradictory social worlds that it measures. If data is to act then it needs ultimately to be brought back into those generative social contexts - which, as Jordi Giró at the Catalan Confederation of Neighbourhood Associations reminds us, means cultivating people skills and political capacity. **Going beyond the Smart City demands something its technocratic efficiency is supposed to make redundant: investment in old-fashioned, street-level skills in community development. Technology vendors cannot sell such skills.** They are cultivated through the kinds of community activism that first brought Ada Colau to prominence, and eventually into office.

Adrian Smith

Adrian Smith is Professor of Technology and Society at the Science Policy Research Unit at the University of Sussex.

Thu 26 Apr. 2018 10.33 BST www.guardian.com

1- After reading the document, identify and present it: (40 words)

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2- Suggest a suitable title in less than 8 words:

_____

3- Pick the equivalent from the word box:

Transcribe (A)- invest (B) - follow up (C) – appalling (D)- dispute (E) – disconnect (F)- appealing (G) – profile (H) - check (I)– powerful (J) – point up (K) - omit (L)– administration (M)- match (N) - minute (O) – scheme (P) – weak (Q) – imitate (R) - scramble (S)-

Report the corresponding letter in the grid:

challenge	alluring	Look up	monitor	oversight
feature	render	correlate	overlook	potent

4- **Reformulate or explain using your own words:**

a- "Ada Colau was elected Mayor on a mandate of democratizing the city and putting citizens centre-stage, digital policy has sought to go 'beyond the Smart City' ":

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b- "Worried that the city's knowledge was being ceded to tech vendors, the Council now promotes technological sovereignty":

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c- “For experts building Big Data city platforms, one sensor in one square is simply a data point. On the other side of that point, however, are residents connecting that data to life in all its richness in their square “

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d- Explain the concept of “**thick description“**(in your own words) :

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e- “Going beyond the Smart City demands something its technocratic efficiency is supposed to make redundant: investment in old-fashioned, street-level skills in community development. Technology vendors cannot sell such skills”

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5**- Decide whether the following statements are right (R) or wrong (W). <u>Justify by quoting the exact portions / phrases from the text</u>:**

a- The overall idea of the document is: cranking up out-moved technology applied to an urban environment.

R / W :

_____

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b- The Catalan capital took to urban-applied technology later than other cities.

R / W:

_____

_____

c- Some of Barcelona's citizens voiced their concern over the city's tech policy and their objections were taken into consideration.

R / W:

_____

_____

d- Some of the neighborhoods mentioned still have the same old good-natured atmosphere.

R / W

_____

_____

e- The administration that recently came into business promotes a different exploitation of the tech tools

R / W

_____

_____

f- The participative tech project, *Make Sense*, was prompted to take over a previous shaky project.

R / W :

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g- The new project has exactly the same scientific focus as the previous one.

R / W:

_____

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h- The experts who piloted the *Make Sense* scheme did not manage to have citizens take to technology

R / W:

_____

_____

i- Similar research has already been conducted and results brought to public knowledge

R / W:

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j- Official findings square with the those of independent investigation

R / W:

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III-Writing:
Write a well-argued 300-word essay on the following topic

Should citizens be involved in participative research on community questions or should they keep entrusting governments with such investigations? Provide supportive arguments and examples.

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Word count: _____

READING COMPREHENSION : text 3

Palo Alto , Calif. — The medical profession has an ethic: First, do no harm. Silicon Valley has an **ethos**: Build it first and ask for forgiveness later.
Now, in the wake of fake news and other troubles at tech companies, universities that helped produce some of Silicon Valley's top technologists are **hustling** to bring a more medicine-like morality to computer science.
This semester, Harvard University and the Massachusetts Institute of Technology are jointly offering a new course on the ethics and regulation of artificial intelligence. The University of Texas at Austin just introduced a course titled "Ethical Foundations of Computer Science" — with the idea of **eventually** requiring it for all computer science majors.
And at Stanford University, the academic heart of the industry, three professors and a research fellow are developing a computer science ethics course for next year. They hope several hundred students will **enroll.**
The idea is to train the next generation of technologists and policymakers to consider the **ramifications** of innovations — like autonomous weapons or self-driving cars — before those products go on sale.

"It's about finding or identifying issues that we know in the next two, three, five, 10 years, the students who graduate from here are going to have to **grapple** with," said Pr Sahami a popular computer science professor at Stanford who is helping to develop the course. He is renowned on campus for bringing Mark Zuckerberg to class.
"Technology is not neutral," said Professor Sahami, who formerly worked at Google as a senior research scientist. "The choices that get made in building technology then have social ramifications."
The courses are emerging at a moment when big tech companies have been struggling to handle the side effects — fake news on Facebook, fake followers on Twitter, **lewd** children's videos on YouTube — of the industry's build-it-first mind-set. They amount to an open challenge to a common Silicon Valley attitude that has generally dismissed ethics as a hindrance.
"We need to at least teach people that there's a dark side to the idea that you should move fast and break things," said Laura Norén, a postdoctoral fellow at the Center for Data Science at New York University who began teaching a new data science ethics course this semester. "You can patch the software, but you can't patch a person if you, you know, damage someone's reputation."
Computer science programs are required to make sure students have an understanding of ethical issues related to computing in order to be accredited by ABET, a global accreditation group for university science and engineering programs. Some computer science departments have folded the topic into a broader class, and others have stand-alone courses.
But until recently, ethics did not seem r**elevant** to many students.
"Compared to transportation or doctors, your daily interaction with physical harm or death or pain is a lot less if you are writing software for apps," said Joi Ito, director of the M.I.T. Media Lab.
One reason that universities are pushing tech ethics now is the popularization of powerful tools like machine learning — computer algorithms that can autonomously learn tasks by analyzing large amounts of data. Because such tools could ultimately alter human society, universities are rushing to help students understand the potential consequences, said Mr. Ito, who is co-teaching the Harvard-M.I.T. ethics course.
"As we start to see things, like autonomous vehicles, that clearly have the ability to save people but also cause harm, I think that people are scrambling to build a system of ethics," Mr Ito said.
Last fall, Cornell University introduced a data science course where students learned to deal with ethical challenges — such as biased data sets that include too few lower-income households to be representative of the general population. Students also debated the use of algorithms to help automate life-changing decisions like hiring or college admissions.
"It was really focused on trying to help them understand what in their everyday practice as a data scientist they are likely to confront, and to help them think through those challenges more systematically," said Solon Barocas, an assistant professor in information science who taught the course.
In another Cornell course, Karen Levy, also an assistant professor in information science, is teaching her students to focus more on the ethics of tech companies.

“A lot of ethically charged decision-making has to do with the choices a company makes: what products they choose to develop, what policies they adopt around user data,” Professor Levy said. “If data science ethics training focuses entirely on the individual responsibility of the data scientist, it risks overlooking the role of the broader enterprise.”

The Harvard-M.I.T. course, which has 30 students, focuses on the ethical, policy and legal implications of artificial intelligence. It was spurred and financed in part by a new artificial intelligence ethics research fund whose donors include Reid Hoffman, a co-founder of LinkedIn, and the Omidyar Network, the philanthropic investment firm of Pierre Omidyar, the eBay founder.

The curriculum also covers the spread of algorithmic risk scores that use data — like whether a person was ever suspended from school, or how many of his or her friends have arrest records — to forecast whether someone is likely to commit a crime. Mr. Ito said he hoped the course would spur students to ask basic ethical questions like: Is the technology fair? How do you make sure that the data is not biased? Should machines be judging humans?

Some universities offer such programs in their information science, law or philosophy departments. At Stanford, the computer science department will offer the new ethics course, **tentatively** titled “Ethics, Public Policy and Computer Science.”

The expectations for the course are running high in part because of Professor Sahami’s popularity on campus. About 1,500 students take his introductory computer science course every year.

The new ethics course covers topics like artificial intelligence and autonomous machines; privacy and civil rights; and platforms like Facebook. Rob Reich, a Stanford political science professor who is helping to develop the course, said students would be asked to consider those topics from the point of view of software engineers, product designers and policymakers. Students will also be assigned to translate ideal solutions into computer code.

“Stanford absolutely has a responsibility to play a leadership role in integrating these perspectives, but so does Carnegie Mellon and Caltech and Berkeley and M.I.T.,” said Jeremy Weinstein, a Stanford political science professor and co-developer of the ethics course. “The set of institutions that are generating the next generation of leaders in the technology sector have all got to get on this train.”

THE NEW YORKER By NATASHA SINGERFEB. Feb. 12, 2018

1- After reading the document, identify and present it using your own words: (40 words)

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2- Suggest a suitable title in less than 8 words: (more than 8 words= 0)

_____

3- Pick the equivalent from the word box.

A- apropos B- probably C- incite D- amazingly E- speed up F-reluctant G- take down H- consequence I- hypothetically J- aptitude K- soon L- temporarily M- approve N- handle O- clear P- Sign up Q- intentionally R- mindset S- someday T- definitely U- obscene V-tender

Report the corresponding letter in the grid below:

Ethos	**Hustle**	**Eventually**	Enroll	**ramification**
Grapple with	**lewd**	**Relevant**	**spur**	**Tentatively**

4- Reformulate using your own words :

a- “They amount to an open challenge to a common Silicon Valley attitude that has generally dismissed ethics as a hindrance. “

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b- “You can patch the software, but you can’t patch a person “

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c- " A lot of ethically charged decision-making has to do with the choices a company makes"

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d- "If data science ethics training focuses entirely on the individual responsibility of the data scientist, it risks overlooking the role of the broader enterprise."

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5- Decide whether the following statements are right **R** or wrong W**:** Cirle **R** or **W** and justify by quoting the appropriate portions / phrases from the text:

a- Healthcare and the tech industry operate the same moral codes & standards

R / W

_____

_____

b- Two of the most prominent academic institutions are separately working, within their respective curricula, on sensitizing scholars to the necessity for morally sustainable new tech.

R / W

_____

_____

c- The objective of the programme is to prompt a downstream reflection on the implications of tech products.

R / W :

_____

_____

d- Customarily, the the tech business puts moral standards centre-stage.

R / W

_____

_____

e- The universities offering such programs have all set fragmentary classes.

R / W

_____

_____

f- According to one the interviewees, the project of grafting moral standards on engineering processes is a smooth, easy-going operation.

R / W

_____

_____

g- One of the the flagship courses mentioned in the article is entirely funded by private benefactors

R / W

_____

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h- Higher education institutions confine the moral code course exclusively to computer science students.

R / W

_____

_____

i- One of the leading universities capitalises partially on the charisma of one its teachers for the success of the new ethics programme.

R / W

_____

_____

j- The signees of the programme would be required to wear several hats when analysing technology-related questions.

R / W

_____

_____

III- WRITING
Write a well-argued 300-word essay on the following topic

The tech industry must be held accountable and therefore pay for all negative ramifications of the products/services it puts on the market. Do you agree ?

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Word count :

Reading comprehension : text 4

HS to launch first internet addiction clinic

Exclusive : centre in London will focus on gaming disorders, with plans to expand
Sarah Marsh@sloumarsh
Fri 22 Jun 2018 17.00 BST Last modified on Sat 23 Jun 2018 00.05 BST

A London hospital is preparing to launch the first ever NHS-funded internet addiction centre for young people and adults, the Guardian can reveal.

The move comes at a time of growing concern about internet and gaming dependency, with the World Health Organization (WHO) classifying gaming disorder as a mental health condition this week. The centre, run by the Central and North West London NHS foundation trust, will initially focus on gaming disorders, with a plan to expand its services to cover other internet-based addictions. It will be a place of treatment and research, offering advice to families.

"Gaming disorder is finally getting the attention it deserves. The distress and harm it can cause is extreme and I feel a moral duty on behalf of the NHS to provide the evidence based treatment these young people and their families need," said psychiatrist Henrietta Bowden-Jones, the clinic's founder.
"We are unlikely to witness an epidemic of young players with an addiction to gaming but for the ones who do struggle, the Centre for Internet Disorders will be a life-changer."

The WHO's decision has been praised by some while others argue that the move is premature. At present there are some private hospitals in the UK where gaming disorder is being treated but none offer free treatment.

Funding has so far been secured for a weekly therapy group for gaming addicts, according to Bowden-Jones. Subject to clearing some final hurdles, the centre will be financed by the NHS, research grants and philanthropic sources.

"This is the first step, but the Centre for Internet Disorders will deal with other internet compulsions, if and when needed, when funding is available. If we end up with 20 people or 30 wanting to be treated for porn addiction, for example ... if we have got the funding for that then we could provide help," she said.

Bowden-Jones said that they were initially focusing on gaming because they were keen to protect young people from dropping out of school. Gaming disorder is defined by the WHO as a pattern of persistent or recurrent gaming behaviour so severe that it takes "precedence over other life interests".

Symptoms include impaired control over gaming and continuation or escalation of gaming despite negative consequences. Some countries had already identified it as a major public health issue, and addiction experts, charities and parents are becoming increasingly concerned about the amount of time children are spending playing online games.

"Other countries have free services, for example there are some in Asia. We are really behind. I am not sure how it took us so long. Maybe it's because we had no champion and I will identify as that champion. You just need one person in the right place at the right time," Bowden-Jones said.
She said there was no consistency in the use of screening tools to determine the scale of internet or gaming addiction. The WHO will work on producing a global tool that everyone can use. Bowden-Jones called for prevalence surveys every one or two years.

Bowden-Jones said that while she was aiming to get NHS funding for the centre, she also recognised the limitations and restricted budgets, saying she also hoped for philanthropic donations, research collaborations and to work alongside charities. "I am also realistic and as someone who is trained in psychiatry and has dealt with frontline psychosis cases I know other things need to be addressed as well," she said.

Jeff van Reenen, addiction treatment programme manager at the Priory's hospital in Chelmsford, said an internet addiction clinic would be incredible and was long overdue. "Internet, social media and gaming addictive or dysfunctional behaviour has been rife for a long time and completely unaddressed other than by people like us," he said.

But other experts were more sceptical. Anthony Bean, a licensed psychologist and executive director of a nonprofit mental health clinic in Fort Worth, Texas, is among those who oppose the WHO's decision to include gaming disorder in its International Classification of Diseases.

"I don't think a centre for gaming or internet addiction is a good idea ... the worry is that it means you are only paying attention to what is going on in front of you rather than around you, which in this case would be the concept of a gaming disorder possibly suggesting that there could be no other reason why a person is seeking mental health treatment. A pigeonhole tactic could lead to misdiagnosis," he said.

Eytan Alexander, a recovering addict and founder of UK Addiction Treatment Centres (Ukat), which runs seven facilities in England, welcomed the news of a treatment centre but noted a difference between people playing as hobby and being addicted.

"The fact the NHS is preparing to open a treatment facility is welcoming news. It's a step in the right direction, but I do believe the NHS should not pigeonhole its limited budget on one particular addiction following lots of media hype," he said.

He said the budget would be better spent on treating addiction generally rather than gaming dependency specifically and that there should be attempts to raise awareness about gaming responsibly.

Data from Ukat centres show the number of people asking for help with gaming addiction has increased from four in 2014 to 16 in 2017. But Alexander said this data was limited because people could be referred for other addiction problems, with gaming later turning out to be the problem.

Adam Cox, a clinical hypnotherapist specialising in addiction, said internet addiction was a growing problem. ***"People who work for social media companies, porn sites, or gaming developers, their goal is to monetise the content they are creating. They are using every trick in the book to get people to spend more time online," he said.***

People now spend money in games on things such as better guns or additional lives, said Cox. Loot boxes, an in-game purchase consisting of a virtual container that awards players with items and modifications based on chance, have attracted controversy and comparisons to gambling in recent months.

"The freemium model where the game is free but then you pay for extras, is putting the emphasis on game developers to make them incredibly addictive and meet psychological needs such as significance and connection, to incentivise players to spend money and time on these games," said Cox.

He added that people can invest hours competing against other players. "If they need to leave the screen for even a few moments it could undo all the effort they have invested up to that point. This is why we're seeing people urinate into bottles or even their beds: they simply can't leave the game once it's started."

Experts said parents should not become alarmed, however, saying only a minority of children would become affected in this way. "It's those who naturally have an addictive personality or are vulnerable [who will be most affected]," Cox said.

He added: "There are benefits to using these games in moderation, for example in helping children to learn hand-eye coordination. But if playing them is the first thing kids do when they wake up and they do that doing instead of other things then it's a problem."

Sarah Marsh@sloumarsh
Fri 22 Jun 2018 17.00 BST Last modified on Sat 23 Jun 2018 00.05 BST

Identify and present the document : (nature, source, date, author and subject matter…)

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_____

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1- Give it a suitable title (les than 8 words) :

_____

2- Define/explain or provide synonyms to the following words they are highlighted in the text :

addiction		recurrent	
move		scale	
concern		hype	
evidence		undo	

3- <u>Decide whether the following statements are right or wrong: circle R or W</u> 3pts

The statement	
R / W	**Quote your justification and specify the § and the lines**

a- The London-based health center will focus exclusively on Internet-related conditions	
R / W	
b- The center will be providing treatment to patients without their families being involved	
R / W	
c- There is general concensus on the relevance of the internet addiction officially recognized as an addiction.	
R / W	
d- The center has a confortable budget and can operate for some time.	
R / W	

e- The center will be funded exclusively by the government.	
R / W	
f- The health initiative is a first in the field and the UK a pioneer	
R / W	

4- Answer the following questions in your own words :

a- Why doesn't Anthony Bean believe in this therapy ? (30 words)

(Because)_____

_____

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b- Why, according to Eytan Alexander, can't the data provided by Ukat centres be reliable ?

(Because) _____

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5- Explain the following excerpts in your own words :

'' People who work for social media companies, porn sites, or gaming developers, their goal is to monetise the content they are creating. They are using every trick in the book to get people to spend more time online," he said

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"People now spend money in games on things such as better guns or additional lives, said Cox. Loot boxes, an in-game purchase consisting of a virtual container that awards players with items and modifications"

Explain **"the freemium model" in your own words :**

II- Writing

Sum up the text in 150-200words :

WORDS COUNT :

READING COMPREHENSION : text 5

Progress Made in Developing Systems for Disaster Mitigation

Pilot project in Chattanooga uses an ultra-fast, high bandwidth system to help emergency workers, local officials and the public determine how to respond to disasters

January 4, 201X

When disaster strikes, an effective response system will tell emergency workers where to go, and enable them to get there unimpeded. Residents will receive information they need in order to protect themselves. Moreover, if it works the way it's supposed to, the system will inspire public confidence.

This will ensure that people in the path of impending danger will heed the instructions they receive, and not ignore them, as has been the tragic case in recent history. "The system has to work well enough to have credibility, so that people will comply," says Henry McDonald, Chair of Excellence in Computational Engineering at the University of Tennessee, Chattanooga. "Compliance has been a big problem in the past because of this lack of credibility."

The National Science Foundation- (NSF) funded scientist is designing a computer-based disaster mitigation system via an ultra-fast high bandwidth system that he predicts will work well enough to inspire such a level of assurance. The goal is to train emergency workers in advance of an event, and deliver real-time information to workers and the public while the event actually is underway.

"There are a lot of high performance tools, computational methods, that can be integrated into a system, allowing you to run accurate scenarios on the computer of how a disaster might unfold, so you can identify weaknesses," McDonald says.

He and his research team are running such computer scenarios in creating the new system, using a computational model with a detailed layout of Chattanooga, Tenn., including streets and buildings, to study what, for example, could happen should a hazardous material be released in a corner of the city. Seeing the disaster occur computationally allows them to put important modifications in place to deal with it.

Simulation

The "contamination," as played out in the computer algorithm, "was borne by the prevailing winds to go all over the city," McDonald says. "Traffic jammed up, and a lot of people were exposed. Thus, the idea was to identify and respond to the disaster in real time."

With such information, "you can make a prediction as to where this hazardous material is going to go, and can divert traffic around it, while directing emergency vehicles to respond," McDonald says. The computer model also "is looking at the real-time behavior of people and how they react in stressful situations. We're exploring what messages to give them, with the goal of saving lives and protecting property."

Chattanooga is a perfect city to test such a response system, since it has the largest community-wide, gigabit-capable network in the country, and an infrastructure able to support disaster mitigation. The researchers currently are installing a small number of sensors that will link to the network, and be able to detect potential hazards.

"The city has this very high-speed network already in place, and an integrated traffic management system tied into this network," he says. "Also, the police all have laptops where they can see street maps, locations and other vehicles in real time."

The work is supported by a White House initiative, US Ignite, and NSF, the project's lead federal agency, which aims to realize the potential of fast, open, next-generation high-speed networks. US Ignite expands upon the NSF-funded Global Environment for Networking Innovation, or GENI, which is laying the technical groundwork for the program.

US Ignite is connecting a series of high-speed, broadband resources to establish a "test bed" across universities and cities on a national scale, providing a fast, programmable "virtual laboratory" to allow academic researchers to experiment on future internets. R/W

The new disaster mitigation system research is among the first US Ignite grants funded by NSF through its early-concept Grants for Exploratory Research (EAGER) program.

The team plans to run additional "what-if" computer exercises to explore ways to respond.

"What will the flooding do?" McDonald poses some of the questions the models will try to answer. "How can we evacuate the population in a reasonable amount of time? How many people are we dealing with? What roads will be available? We can work on this planning in time to execute, and also expedite, the recovery process."

Even during an emergency situation, these state-of-the-art fiber networks prove very resilient, McDonald says. "Quite a bit of the infrastructure will survive," he says. "The fiber is either on top of utility poles or underground. It comes up out of the ground, up the pole and into a portal. Police cars and fire engines hook into that portal via WiFi and get onto the network that way. There is a lot of communication ability we have now that we didn't have before, a lot of computing horsepower that we never had before."

Also, "the same type of communication system is available in cell phones, so residents, if they opt in to these systems, will get all the messages," he adds. R/W

Although the pilot project for the system is set in Chattanooga, McDonald expects every city in the United States to benefit. "You need big computers, but you can access the Cloud and access large systems over high-speed bandwidth," he says. "If it works in Chattanooga, it can work anywhere.

-- Marlene Cimons, National Science Foundation
http://www.nsf.gov/discoveries

3

1. **Identify and present the document : (write a short paragraph)**

2. **Suggest a title: (less than 8 words)**

How to waste money in security thing that will nether append

3. **Give a synonym or a definition to the following. These are highlighted in the text.**

UNIMPEDED	unobstructed
IMPENDING	imminent
HEED	pay attention
COMPLY	obey, follow
UNFOLD	develop, evolve
LAYOUT	Arrangement, design
STATE OF THE ART	cutting-edge
RESILIENT	Durable, strong
HOOK INTO	Connect, link

4

4. **Decide whether the following statements are right or wrong. <u>Circle</u> R or W & <u>Quote</u> the relevant justification (line (s) & paragraph):**

a- The system is fully proven. R – W: §. L.
b- It is the brainchild of a researcher who has invested his own money in the project. R – W: §. L.
c- Thanks to the system, we will be able to know when hazards and calamities occur.

R – W:	§.
d- The researchers have used real disaster situations to fine-tune the system. R – W:	§.
e- The system will be using the frequency networks with current existing speed. R – W:	§.
f- US IGNITE has a crisis unit which works on how to anticipate disasters. R – W: Line 63	§.
g- One of the pitfalls of the system is the complete network failure in case of a massive disaster. R – W:	§.
h- People will be kept posted off-line. R – W:	§.

5. Explain in your own words

"The team plans to run additional "what-if" computer exercises to explore ways to respond."

Run other simulation

5

6. Sum up the document in 130-160 words: **use your own words**

Word count:

READING COMPREHENSION : text 6

If Algorithms Know All, How Much Should Humans Help?

APRIL 6, 2018 The New York Times

Armies of the finest minds in computer science have dedicated themselves to improving the odds of making a sale. The Internet-era abundance of data and clever software has opened the door to tailored marketing, targeted advertising and personalized product recommendations. Shake your head if you like, but that's no small thing. Just look at the technology-driven shake-up in the advertising, media and retail industries.

This automated decision-making is designed to take the human out of the equation, but it is an all-too-human impulse to want someone looking over the result spewed out of the computer. Many data quants see marketing as a low-risk — and, yes, lucrative — petri dish in which to hone the tools of an emerging science. "What happens if my algorithm is wrong? Someone sees the wrong ad," said Claudia Perlich, a data scientist who works for an ad-targeting start-up. "What's the harm? It's not a false positive for breast cancer."

But the stakes are rising as the methods and mind-set of data science spread across the economy and society. Big companies and start-ups are beginning to use the technology in decisions like medical diagnosis, crime prevention and loan approvals. The application of data science to such fields raises questions of when close human supervision of an algorithm's results is needed.

These questions are spurring a branch of academic study known as algorithmic accountability. Public interest and civil rights organizations are scrutinizing the implications of data science, both the pitfalls and the potential. In the foreword to a report last September, "Civil Rights, Big Data and Our Algorithmic Future," Wade Henderson, president of The Leadership Conference on Civil and Human Rights, wrote, "Big data can and should bring greater safety, economic opportunity and convenience to all people."

Take consumer lending, a market with several big data start-ups. Its methods amount to a digital-age twist on the most basic tenet of banking: Know your customer. By harvesting data sources like social network connections, or even by looking at how an applicant fills out online forms, the new data lenders say they can know borrowers as never before, and more accurately predict whether they will repay than they could have by simply looking at a person's credit history. The promise is more efficient loan underwriting and pricing, saving millions of people billions of dollars. But big data lending depends on software algorithms poring through mountains of data, learning as they go. It is a highly complex, automated system — and even enthusiasts have qualms.

"A decision is made about you, and you have no idea why it was done," said Rajeev Date, an investor in data-science lenders and a former deputy director of Consumer Financial Protection Bureau. "That is disquieting."

The concern is similar in other fields. Since its Watson computer beat human "Jeopardy" champions four years ago, IBM has taken its data-driven artificial intelligence technology well beyond brainy games. Health care has been a major initiative. The history of "expert" decision-support technology in medicine has been disappointing; the systems have not been smart or fast enough to really help doctors in day-to-day practice.

But IBM scientists in collaboration with researchers at leading medical groups — including the Cleveland Clinic, the Mayo Clinic and the Memorial Sloan Kettering Cancer Center — are making progress. Watson can read through medical documents at a pace incomprehensible to humans:

many thousands per second, searching for clues, correlations and insights.

The software has been used to help train medical students and is starting to be deployed in clinical settings in oncology, offering diagnostic and treatment recommendations as a kind of quick-witted digital assistant.

IBM has also developed a software program called Watson Paths, which is a visual tool that allows a doctor to see the underlying evidence and inference paths Watson took in making a recommendation.

"It's not sufficient to give a black-box answer," said Eric Brown, IBM's director of Watson technologies.

Watson Paths points to the need for some machine-to-man translation as data science advances. As Danny Hillis, an artificial intelligence expert, put it, "The key thing that will make it work and make it acceptable to society is story telling." Not so much literal story telling, but more an understandable audit trail that explains how an automated decision was made. "How does it relate to us?" Mr. Hillis said. "How much of this decision is the machine and how much is human?"

Keeping a human in the loop is one approach. The new data-science lenders are animated by data and software. But one of the start-ups in San Francisco, Earnest, has at least one of its staff members review the predictive recommendations of its software, even if the algorithms are rarely overruled. "We think the human element will always be an important piece in our process to make sure we're getting it right," said Louis Beryl, co-founder and chief executive of Earnest.

But such a stance, others say, amounts to a comforting illusion — good marketing perhaps, but not necessarily good data science. **Giving a person veto power in algorithmic systems, they say, introduces human bias. The promise of big data decision-making, after all, is that decisions based on data and analysis — more science, less gut feel and rule of thumb — will yield better outcomes.**

Yet even if optimism is justified, there is a serious challenge, given the complexity and opacity of data science. Will a technology that promises large benefits on average sufficiently protect the individual from a mysterious and wayward decision that might have a lasting effect on a person's life?

One solution, according to Gary King, director of Harvard's Institute for Quantitative Social Science, may be for the human creators of the scoring algorithms to tweak them not so much for maximum efficiency or profit but to give somewhat greater weight to the individual, reducing the risk of getting it wrong.

In banking, for example, an algorithm might be tuned to reduce the probability of misclassifying a loan applicant as a deadbeat, even if the trade-off is a few more delinquent loans for the lender.

"The goal," Mr. King said, "is not necessarily to have a human look at the outcome afterwards, but to improve the quality of the classification for the individual."

In a sense, a math model is the equivalent of a metaphor, a descriptive simplification. It usefully distills, but it also somewhat distorts. So at times, a human helper can provide that dose of nuanced data that escapes the algorithmic automaton. "Often, the two can be way better than the algorithm alone," Mr. King said.

S. Lohr, a technology reporter for The Times, is the author of "Data-ism."

Read the text and answer the following questions in <u>your own words</u> :

1. Define big data science : (40-50words)

2. What are the assets and drawbacks of the banking industry's consumer lending methods? (50-60 words)

3. Explain the following passage : (50-60words)

   « Giving a person veto power in algorithmic systems, they say, introduces human bias. The promise of big data decision-making, after all, is that decisions based on data and analysis — more science, less gut feel and rule of thumb — will yield better outcomes. »

Writing

Write a well-argued essay on the following topic. (Target length: 250-300words)

Is the man-initiated headlong rush of machines and computers unstoppable? Aren't we likely to be written out of the equation the day the machines become too smart to be kept on a leash?

SPEAKING

Team working

TEAM 1

At the 2021 Computer & Internet Industry Conference (CIIC) in Las Vegas

Las Vegas is hosting this year's CIIC and your team has been given the unique opportunity of going on stage to present an innovative project to an audience of specialits and journalists. Knowing that could be the time of your life, there is no way that you can let this pass. The problem is that you do not really have a polished project to present and you are pushed for time.
Within 45 minutes, you mùust elaborate your project together, talk about it, exchange points of view, come to an agreement. Have a 5-minute break, the deliver it to the audience in clear English. Your presentation can't exceed 20 minute, questions included.

The group project

You aim to present 3innovative apps for the latest smart phone and tablets that will be useful for everyday domestic needs.

- **Present yourselves, your background and your company**
- **Present your company's 3 apps**
- **Conclude**
- **Leave time for questiosn from the audience. If no questions come, ask the audience questions**

TEAM 2

At the 2021 Computer & Internet Industry Conference (CIIC) in Las Vegas

Las Vegas is hosting this year's CIIC and your team has been given the unique opportunity of going on stage to present an innovative project to an audience of specialits and journalists. Knowing that could be the time of your life, there is no way that you can let this pass. The problem is that you do not really have a polished project to present and you are pushed for time.
Within 45 minutes, you mùust elaborate your project together, talk about it, exchange points of view, come to an agreement. Have a 5-minute break, the deliver it to the audience in clear English. Your presentation can't exceed 20 minute, questions included.

The group project

You aim to create a new social network. You have quite a few ideas and youy want to sabmit them to a crtical audience.

- **Present yourselves, your background and your company**
- **Present your company's new concept**
- **Conclude**
- **Leave time for questiosn from the audience. If no questions come, ask the audience questions**

TEAM 3

At the 2021 Computer & Internet Industry Conference (CIIC) in Las Vegas

Las Vegas is hosting this year's CIIC and your team has been given the unique opportunity of going on stage to present an innovative project to an audience of specialits and journalists. Knowing that could be the time of your life, there is no way that you can let this pass. The problem is that you do not really have a polished project to present and you are pushed for time.
Within 45 minutes, you mùust elaborate your project together, talk about it, exchange points of view, come to an agreement. Have a 5-minute break, the deliver it to the audience in clear English. Your presentation can't exceed 20 minute, questions included.

The group project

You aim to create a new domestic robot. The robot is for everyday indoor purposes

- **Present yourselves, your background and your company**
- **Present your company's new robot**
- **Conclude**
- **Leave time for questiosn from the audience. If no questions come, ask the audience questions**

Listening Comprehension : 1

1. What radio channel aired this programme ?

_____

2. Fill in the blanks with the appropriate word or phrase from the recording :

'' There was an epic ……. that took place last night at the IBM offices in San Francisco. A computer …… …….. a person in what some …….. are …….. as a …….. in artificial intelligence.''

1	2	3
4	5	6

3. Who are they ?

The male voice	
Laura Sydell	
Noa Ovadia	

4. Why did IBM organize this happening ?

_____

_____

5. What did IBM make the buzz with in the past?

_____

_____

6. Why is the *Project Debater* different from IBM's previous challenges?

_____

_____

7. How are the computer's opponents referred to ?

They are ……..(1 word)

8. Who won out accotding to Laura SYDELL ?

_____

9. The human debaters were not in favor of telemedecine whereas the computer had a different standpoint. What joke did the machine make :

_____

_____

10. Fill in the blanks with words from the audio :

'' I think the machine has …….. an incredible degree of ……..., both in terms of sentence …….. and in terms of argument construction. And I think it's at the …….. where it's …… to some …….. debaters. Maybe not the best in the world, but definitely well-informed ……..and ……..construction

1	2	3	4
5	6	7	8

11. Why according to the male voice is this a big moment ?

_____

12. This is significant. What does it show according to Sydell?

_____

_____

13. How does the machine manage ?

_____

_____

14. Fill in the blanks with the missing words from the audio :

'' And …….. what this means is that we could start to use computers - say, a …….. could use it to make better ……., or it might help doctors and …… decide on the best course of …….. or it could help you even pick ……..''

1	2	3
4	5	6

15. When will the IBM computer be on sale ?

_____

LISTENING COMPREHENSION: 2

1- Fill in the blanks with the missing word from the audio:

" It's not really a surprise that people's personal data on Facebook was ___1__ and sold and ___2___around. Most people have known for quite some time now that our information online is far from ___3___. But the __4__ news about Cambridge Analytica getting millions of people's information seems to have __5__ a ___6__."

1		4	
2		5	
3		6	

2- Who are they? Mention jobs, institutions locations when applicable:

Michel MARTIN	
Siva VIAIDHYANATHAN	
Robert MERCER	

3- What happened right after of the recent revelation about Facebook ?

_____

_____

_____

4- Who according to the guest is behind this reaction?

_____

_____

5- Why does he think that this latest scandal will be consequence-free for Facebook?

_____

_____

6- How long have the social media professionals and business officials known about this wrongful practice ?

_____

7- Fill in the blanks with the missing words from the audio

"Facebook has been sort of promiscuously and notoriously ___1___ and ___2__ with our data. Now,

people are ___3___ about it, and they should be, but they should have been ___4___ about it then, too."

1		4	
2		5	
3		6	

8- Why according to Vaidhyanathan was nobody paying attention to Facebook's deviance?

_____

_____

9- Why is it different this time around? What signals a major change?

_____

_____

10- To what tortious ends had President Trump exploited Facebook during the presidential election ? quote 3 words :

1.	2.	3.

10- Why according to the guest is the recent public ouburst regrettable?

_____

_____

11- Why according to him is it getting more attention?

_____

_____

12- What powers does the huge number of users confer to Faczbook ? pick 4 adjectives :

..... POWER	..... POWER
..... POWER	..... POWER

13- What means of retaliation does the guest recommend against Facebook's abusive conduct?

_____

_____

14- fill in the blanks with the appropriate words from the recording :

In a ___1___ today, CEO Mark Zuckerberg ___2___ a ___3___ of trust, "between Facebook and the people who share their data with us and ___4___ us to protect it,"

1		3	
2		4	

LISTENING COMPREHENSION : 3

1- What is the name of this radio program and what radio channel brought it:

a- radio program : Digital age / all tech considered

b- radio channel : PR Mews

2- Who is Alexander Reben ?

c- artist / robotics engeneer

3- What robot did he invent ? What makes it incompatible with one of the robotics laws previoulsy set? What is its utility value ?

d- Robot to hurt people,

e- "Robot can't heart humain"
Ro should rather being

f- no practice use,

4- Fill in the gap with the missing words from the audio :

g- "It's not a very ___1___ robot, it is just a ___2___ arm on a ___3___. It's smaller than a human arm and ___4___a little like the arm on one of those _____5_____ they use for ___6___ — but instead of a ___7___on the end, there's a ___8___.

1	elaborate	5	excavate
2	robotic	6	construction
3		7	shovel
4		8	pin

5- Explain the workings of the machine :

h- algo arms
needle

6-What is the point of this machine ?

i- Think about world we machine can heart humain / made the decision

7- Reben gives the Self-driving cars as an example. What two options does the inventor explain a smart car caould be left with when it has to responf to an emergency ?

j_____

8- In what way, according to Reben, will a decision made by a machine differ from one made by a human?

K_____ They will be more ethical

9- Why question does that pose ?

l- _____

10- A recent MIT media lab poll/study confirmed that this question is relevant. What do we learn about

50% of the respondents in the survey:

M- By a driverless car that prior the passenger life

1/5 of the respondents:

n- same the mart life

11- Who inspired Reben's work ?

l- asic asmov, Law of robot

12- What is he famous for ?

m- law of robot + i Robot

LISTENING COMPREHENSION : 4

1- Who aired this programme?

Steve Handers

2- What sort of event is LAS VEGAS hosting?

Hacker event

convention of hackers

What is the difference between the 2 conventions mentioned?

Convention 1 : Network - Security | industry - corporate business | Technology

Convention 2 : Kids, raging group, safe place for hackers to meet cadaths

3- What is common to both groups?

- Both are ethical hacker showing off (one word)

4- Why is this paradoxical?

Find a vulnerability that make people vulnerable | Hacker = illegal

5- How do members in both groups operate? and how is this beneficial to companies and consumers?

Find vulnerability, inform the corporation.

Strange relationship w/ corporate

6- What is "the wall of sheep"?

Try to find info of people around us

7- Why is it called so?

sheep because u lacks of Personal security

8- Who will be giving a keynote address at one of the two conferences? Name & occupation

- Name:

Keynan

- Occupation:

Director of the national Security Agency

9- Why is he going to face a tough audience?

lack of trust, impression that the NSA can come and spy it

LISTENING COMPREHENSION : 5

1. What initiated this interview between the host and R. Kurzweil?

   -

2. What subjects did Martin Minsky teach at MIT?

   -

3. What award did he win? How is this award referred to?

   -

   -

4. Who is Ray Kurzweil?

   -

5. Knowing this audio programme was aired in January 2016 and drawing on details mentioned in the interview:

How old is Kurzweil now?	When was Minsky born?	How old was Kurzweil when he first met with Minsky?

6. Ray Kurzweil refers to Minsky as a consummate educator. What anecdote does he tell the host to explain this?

   -

6. Minsky is referred to as a multidisciplinary person. Pick out 6 areas of his expertise:

e.g music
1.
2.
3.
4.
5.
6.

7. What are the two main schools of thought in artificial intelligence that Minsky invented:

   -

   -

8. Why is his work in the 1950's referred to as "prophetic"?

   -

9. What was his contribution in 1951?

-

10. Fill in the blanks with the appropriate word(s) from the audio. Mark your answers in the grid:

1.	7.
2.	8.
3.	9.
4.	10.
5.	11.
6.	12.

11. What did Minsky forecast in the video interview he gave to Ray Kurzweil?

-

12. Fill in the blanks with the appropriate word from the recording:

1.	4.
2.	5.
3.	6.

13. What does Kurzweil mean by "technology is a double-edged sword"

-

14. Why does Kurzweil think that it's a pity that Minsky has passed away?

-

Basic Computing Glossary

I- Word association:

find the missing link

Each of the sets of 4 words can be linked by 1 other word. What is the missing word? Write it in the chart as in the example :

Relational	database	engine
On-line		language

mechanical		pointer
bus		driver

Floppy (osbolete!)		formatting
Back-up		drive

Laser		buffer
Ink-jet		quality

touch		saver
text		capture

data		sharing
disk		transfer

II- Two-word partnerships:

Find the word partnership by matching a word from column A with a word from column B according to the definition provided:

A	B
~~1. Artificial~~	Technology
2. Clip	System
3. Desktop	Publishing
4. Read	Only
5. Expanded	Processing
6. Hard	Mail
7. Information	Multitasking
8. Integrated	Memory
9. Electronic	~~Intelligence~~
10. Operating	Friendly
11. Optical	Fibre
12. Parallel	Disk
13. Preemptive	Database
14. relational	Circuit
15. user	art

1. computers that try to emulate human intelligence
   Artificial intelligence
2. circuit where all active and and passive components are formed on one piece of a semi-conductor
3. set of data where all items are related

4. design, layout and printing of documents, books and magazines using special software
5. computer operating on several tasks simultaneously
6. fine strands of glass or plastic used for the transmission of light signals
7. a feature of some operating systems that allows them to run several programs at the same time in an efficient manner
8. software that is easy to use and interact with
9. rigid magnetic disk that is able to store many times more data than the old floppy disk and usually cannot be removed the disc drive that is located in a PC
10. Set of pre-drawn images of drawings that a user can incorporate into a presentation, report or desktop publishing document
11. Extra RAM fitted to a PC compatible that is located above 1MB, but that requires a software before it can be used
12. Way of sending and receiving messages between users on a network
13. Software that controls and coordinates the actions of the different parts of your computer
14. Technology involved in acquiring, storing processing and distributing information electronically
15. File or memory device whose stored data cannot be changed

III- same exercise as above:

1. Baud	Analysis
2. Catastrophic	Bus
3. Clean	Code
4. Device	Degradation
5. Flip	Detector
6. Floppy	Directory
7. Graceful	Disk
8. Interactive	Driver
9. Laser	Error
10. Local	Flop
11. Machine	Machine
12. Root	Printer
13. Speech	Rate
14. System	Recognition
15. virus	Video

1- programming language consisting of commands in binary code that can be directly understood by the CPU without that need for translation

Machine code

2- Electronic circuit whose output can be one two states, which can store one bit of data
3- Secondary storage device
4- Computer that contains only the minimum ROM-based code to boot its system from disk
5- Analyzing spoken words in such a way that they can be processed in a computer to recognise spoken words and commands
6- Starting node from which all paths branch in a data tree structure
7- Analyzing a process to see if it could be carried out more efficiently by computer
8- Utility software which checks executable files to see if they have been infected with a known virus
9- High resolution output device
10- Direct link between a device and the processor
11- System that uses a computer linked to media disk player to provide processing power and real image
12- Allowing some parts of the system to continue to function after a part has broken down
13- Error error that causes a program to crash
14- Measure of number of signals transmitted per second

IV- Three-word expressions:

Make 12 3-word expressions connected with computing by combining words from the 3 lists A,B & C. match each expression with its definition:

A	B	C
BULLETIN	**ACCESS**	**EXAMPLE**
~~**CENTRAL**~~	**AREA**	**EXCHANGE**
DOTS	**BOARD**	**INCH**
DYNAMIC	**BY**	**INJURY**
GRAPHICAL	**CHARACTER**	**INTERFACE**
LOCAL	**DATA**	**MEMORY**
NEAR	**DOWN**	**MENU**
OPTICAL	**LETTER**	**NETWORK**
PULL	**PER**	**QUALITY**
QUERY	~~**PROCESSING**~~	**RECOGNITION**
RANDOM	**STRAIN**	**SYSTEM**
REPETITIVE	**USER**	~~**UNIT**~~

1. Central+arithmetic & logic unit+input/output unit
   ……..
2. Pain in the arm felt by someone who performs the same movement many times over, as when operating a computer terminal.
   ……..
3. Interface between an operating system or program and the user.
   ……..
4. Memory that allows access to any location in any order
   ……..
5. Information and message database accessible by modem and computer link
   ……..
6. Set of options that are displayed below relevant entry on a menu bar
   ……..
7. Simple language used to retrieve information from a database management system
   ……..
8. Network where various equipment are all a short distance from one another and can be interconnected by cables
   ……..
9. Method by which two active programs can exchange data
   ……..
10. Standard method used to describe the resolution capabilities of a page printer or scanner
    ……..
11. Process that allows printed or written characters to be recognized optically and converted into machine-readable code that can be input into a computer
    ……..
12. Printing by a dot-matrix printer that provides higher quality type, which is almost as good as a typewriter, by decreasing the spaces between dots.
    ……..

V- Verbs:

All the verbs in the box relate to computing. Use them to complete the sentences.

Configure disconnect ~~expand~~ generate halt install paste process purge recover run save simplify simulate undo

1. If you want to hold so much data, you will have to ***expand*** the disk capacity
2. Hitting Ctrl –S will……..the program.
3. We will……the new data
4. Each month, I ……..the disk of all old email messages
5. You have just deleted the paragraph, but you can ……..it from the option in the Edit menu
6. You only have to……..the PC once –when you first buy it.
7. Don't forget to……..the file before switching off.
8. It is impossible to……..the data but it can take a long time.
9. We can ……..an image from digitally recorded data.
10. This software is able to……..the action of an aircraft.
11. Function keys……program operation.
12. The new package will ……..on my PC
13. The system is easy to ……and simple to use.
14. Now that I have cut this paragraph from the end of the document, I can ……it in here.
15. Do not forget to……..the cable before moving the printer.

VI- Verbs: match the verb with its definition

Verb	**Definition**
1.assign	a. to write data to a location and, in doing so, destroy any data already contained in that location
2. broadcast	b. To make part of a text stand out from the rest
3. transfer	c. To switch between two states
4. emulate	d. To start or run a program
5. highlight	**e.** To give a computer or someone a job to do
6. input	f. to copy or behave like something else
7. launch	g. to distribute information over a wide area or audience
8. monitor	h.to look after and supervise a process to make sure it is opening properly
9. overwrite	i. to move data from one device or storage area to another
10. relay	j. to check or repair or maintain
11. service	k. to transfer data or information from outside a computer to its main memory
12. toggle	l. to receive data from one source and to transmit it to another point

VII- verbs: mixed tenses

The verbs in the box relate to computing matters. Use them to complete the sentences. You may have to change the forms of the verbs to fit the grammar of the sentences:

access cache carry computerize conform copy degauss extract house identify lose modify run share supersede

1. She ……the employee's file stored on the computer
2. This CPU ……..instructions so improves performance by 15%
3. Our stock control has been completely……
4. The software will not run if it does not ……to the operating system standards.
5. We can ……the files required for typesetting
6. The maintenance engineers have ……..the cause of the system failure.
7. Backing up involves ……..current working files onto a separate storage disk
8. All the current files were……when the system crashed and we had no backup copies
9. The keyboard was……..for European users

10. Do not interrupt the spelling checker while it is ……..
11. The facility is ……..by several independent companies
12. The new program……..the earlier one and is much faster.
13. The fiber optic link……..all the data.

VIII- Phrasal verbs:

verb	Definition
1. back up	a. to enter various identification data, such as a password, usually by means of a terminal to the central computer before accessing a program or data
2. break down	b. to configure/initialize/define/star an application or system
3. fill up	c. to allow a machine to stand idle for a time after switching on, to reach optimum operation conditions
4. 4. key in	d. to stop working because of a mechanical failure
5. log off	e. to enter a symbol or instruction at the end of a computing session to close all files and break the channel between the user's terminal and the main computer
6. log on	f. to read data or a signal from a recording medium
7. play back	g. to exit the operating system, while the original application is still in memory and the user then returns to the application
8. plug in	h. to make text continue without a break
9. power up	i.to make a copy of a file or data or disk
10. run	j. to enter text or commands via a keyboard
11. set up	k.to make something completely full
12. shell out	l.to disconnect the power supply to a device
13. switch off	m.to switch on or apply a voltage to an electrical device
14. warm up	n.to male an electrical connection by pushing a plug into a socket

IX- Adjectives:

Complete the sentences using the adjectives in the box. Use each adjective only once.

Clean crash-protected dedicated downloadable electroluminescent excessive faulty normal re-chargeable redundant common unformatted unpopulated user-friendly concurrent

1. A **re-chargeable** battery is used for RAM back-up when the system is switched off.
2. I will have to start again- I have just erased the only……copy.
3. This is a ……..fault with this printer model
4. Each……process has its own window
5. There is only one ……..graphics workstation in this network
6. The ……..procedure is for back-up copies to be made at the end of each day's work
7. It is impossible to copy an……..disk
8. There must be a……piece of equipment in the system.
9. If the disk is……., you will never lose your data.
10. The screen coating is……..
11. The program used an ……..amount of memory to accomplish the job.
12. The program is very……..
13. These fonts are ……..
14. The parity bits on the received data are ……and can be removed.
15. You can buy an ……..RAM card and fit your own RAM chips.

X- Adverbs

The sentences below do not read correctly. Identify the adverbs in the sentences and then swap them around so that each sentence makes sense. Some of the adverbs could be used in several of the sentence but make sure they make sense.

1. We deal manually with manufacturer, without using a wholesaler.
   ……
2. They were both alphabetically responsible for the successful launch of the new app.
   ……
3. The text is consecutively transmitted to an outside typewriter.
   ……
4. The files are arranged fully under the customer's name
   ……
5. Processing time is electronically 10% lower than during the previous quarter
   ……
6. The sections of the program run incorrectly
   ……
7. A daisy wheel printer produces directly formed characters
   ……
8. In spooling, the printer is acting equally from the keyboard
   ……
9. The data was approximately keyboarded
   ……
10. The paper has to be fed into the printer independently
    ……

XI- Opposites:

Find the words in **B** opposite to the word or phrases in **A:**

A	**B**
Anode	Built-in
authorize	Cancel
automatic	Cathode
Backward	Close
Boot up	Complicated
Character based	Divide
Column	Duplex
Confirm	Forbid
Continue	Forward
Delete	Graphical
Flexible	Interrupt
Hardware	Manual
Landscape	Multiple
Multiply	Portrait
Open	Receive
Add-on	Restore
Simplex	Rigid
Simple	Row
Single	Shut down
transmit	software

XI- THIS & THAT

A		B
bells		**click**
cut		**columns**
drag		**drop**
hyphenation		**embedding**
point		**flutter**
rows	**&**	**justification**
search		**paste**
terminate		**replace**
tilt		**stay resident**
object linking		**swivel**
wow		**whistles**

1. This is just a basic program- it does not have any ……..
2. If you change your mind, you can use ……..
3. If you want to add a comment to your information in the report, you can use……..to get……..information from the word processor and copy it into the worksheet.
4. The speakers on that PC are very cheap - Listen to the amount of ……..they have.
5. You use a mouse to navigate a GUI: you can siply……..on icons to make most selections.
6. I use a little……..program to check for virues.