

TASK 1

1- All companies work in AI fields

Company	Domain
ABM Egypt	NLP, Social Media analytics, Search Engine optimization
Adam.ai	NLP, machine learning, embedded systems
Advansy ESC	Embedded Software, Big data, IoT
Affectiva	Machine learning, Deep learning, Computer vision, Speech(new project(s))
Agolo	NLP, ML, DL
Arqamfc	Analytics
Ave labs	Deep learning, Machine learning techniques, Computer vision, Image Processing and Signal Processing, Control theory & Artificial Intelligence
AvidBeam	Machine learning, OCR, Computer vision, DL
Elves	Chatbots
Bee Smart Payment Solutions	ML, Big Data
Cequens	Predictive models, Machine Learning, Chatbots
Cognitev	ML, DL, Recommendation systems, IR (Information Retrieval), NLP (Natural - Language Processing)
Comiot	IoT, Computer vision, ML
Crowd Analyzer	Big data, Machine learning, Social Media Analysis, Arabic in Social Media Analytics
Data Gear BI	Data Mining, Business Intelligence(BI)
El menus	Recommendation systems, NLP
Heuro Labs	Artificial Intelligence, Cognitive Computing, Machine Learning,

Company	Domain
	Big Data, Data Fusion and Data Mining
IBM Egypt	NLP(Watson practice team), ML, DL
Incorta	Robotics, computer vision
InnoVision Systems	Robotics, computer vision
Itworx	Big Data
Knowledge officer	information retrieval and text summarization for articles on the web. Based mainly for many NLP and recommendation systems
Mendel.ai	Artificial Intelligence in Medicine, Machine learning, OCR, NLP
Microsoft ATLe	ML, DL, NLP, OCR, Speech, Search engines(Bing team)
Optomatica	Machine Learning, AI and Optimization solutions, Analytics
Oracle	Machine learning, Big data
Orange	ML, Big Data, Data Analytics
Pixellion	Image processing, Machine learning, Deep learning, Computer vision, image recognition in the retail industry
Raisa Energy	ML, predictive modeling
RDI	Machine learning, Deep learning, Arabic/English OCR, Search engines, Information retrieval, Arabic/English NLP and Arabic/English speech recognition/identification
Rology	Computer Vision, Medical Image Processing, Machine Learning
Sadeem®	IoT & Business Analytics
Seeloz	Data analytics, ML
Soho Square Solutions	IR (Information Retrieval), ML, NLP (Natural - Language Processing)
Speakol	ML, DL, Big Data
Sypron	Big Data, ML, DL, Computer vision, NLP, General AI apps

Company	Domain
Stratochem	Data analysis, Image processing, data mining
Tactful	Conversational Agents, NLU, DL, Information Retrieval
Tahrir news	Machine learning, Deep learning, NLP(Arabic & English)
TA Telecom	Big Data
Teradata	Big Data Analytics, machine learning and data mining
The D. GmbH	NLP, Chatbots, Computer Vision, Video Analysis
Tpay	Machine learning
Usy tech	NLP
Valeo	ML, DL, reinforcement learning, Computer vision, Autonomous driving
Wego	Data analysis, machine learning, recommendation systems
WideBot	Chatbots, NLP
Wuzzuf	Machine learning, NLP(new project(s)), Search engines, Recommendation/Ranking systems and information retrieval
Xtrava	Machine learning, Deep learning, Signal processing
Yaoota!	Search engine, Big data, ML, NLP
Vodafone	Big data, ML
Wakeb Data	Business Intelligence, Data Analysis, Artificial Intelligence
DilenyTech	Computer Vision
Synapse Analytics	ML, Computer Vision
Asas Alqarar	Machine Learning, Deep Learning
Dell EMC	Machine Learning, Big Data
360imaging	Computer Guided Surgery, Medical Imaging
Fruitful Solutions	Deep Learning, Computer Vision
Advanced Intelligent	Machine Learning, Deep Learning

Company	Domain
Technologies	
Digified	Machine Learning, Computer Vision
iHub	Machine Learning
Smart Medical Services	Machine Learning
Okhtub	Machine Learning
DevisionX	Deep Learning, Computer Vision
ztechnium	Machine Learning, Recommendation Systems
Lyra)	Machine Learning
Cammedar Health	Machine Learning
Botme	Chatbots, NLP
Converted.in	Machine Learning
MerQ	Chatbots, NLP
Digisay	Machine Learning, Deep Learning
Intouch	Machine Learning, Deep Learning
Cassbana	Machine Learning, Deep Learning
Pegasus	Data Analytics, BI
Z2data	Data Analytics
Dataplusme	Data Analytics, Data Science, Big Data Analytics, Data visualization
3adda	Data Analytics, Business Intelligence
Path Solutions	Big Data
Ingram Micro	Data Science, Business Intelligence
Scopic	Big Data
TPay Mobile	Data Engineering, Data Analytics

Company	Domain
The Procter & Gamble	Data Science
Henkel	Data Science, Business Intelligence
Halan	Data Analysis, Business Intelligence, Data Science
Mwasalat Misr	Data Analysis, Business Intelligence, Data Science
Swvl	Data Analysis, Business Intelligence, Data Science
Buseet	Data Analysis, Business Intelligence, Data Science
Mawdoo3	Data Science, NLP
Botitapp	Data Science, NLP
Koinz	Data Analysis
Brightskies	Machine Learning, Autonomous Driving
DXWand	Machine Learning, text and speech analytics, NLP, analytics services
MobiDev	AI apps
Cyshield	Data Science
Fixed Solutions	Data Science
Nawy	Data Science, Business Intelligence
Lenme	Machine Learning
Atomica	Machine Learning, Computer Vision
blnk.ai	Machine Learning
Aimtechnologies	Data Science, Machine Learning
SURE International Technology	Machine Learning, AI
BBI-Consultancy	Data Science
Tensorgraph	AI, Voice Recognition

2- Types of Errors in Programming

1. Syntax errors: Mistakes in the code that violate the rules of the programming language.
2. Runtime errors: Errors that occur while the program is running, such as dividing by zero or trying to access an invalid memory location.
3. Logic errors: Mistakes in the program's design or implementation that cause it to produce incorrect results.
4. Semantic errors: Errors that occur when the code is syntactically correct but doesn't do what the programmer intended it to do.
5. Compilation errors: Errors that occur during the compilation process, such as missing libraries or incorrect syntax.
6. Linking errors: Errors that occur when the linker cannot find the necessary libraries or files.
7. Input/output errors: Errors that occur when the program cannot correctly read or write data from or to external sources.
8. Arithmetic errors: Errors that occur during mathematical operations, such as overflow or underflow.
9. Null pointer errors: Errors that occur when a program tries to access memory that doesn't exist.
10. Memory leaks: Errors that occur when a program allocates memory but fails to release it, causing the program to run out of memory.
11. Security vulnerabilities: Weaknesses in the program's design or implementation that could be exploited by attackers.
12. Type errors: Errors that occur when the program tries to use a variable or object of the wrong data type.
13. Boundary errors: Errors that occur when a program accesses an array or other data structure beyond its bounds.
14. Concurrency errors: Errors that occur when multiple threads or processes access the same data simultaneously, causing race conditions or deadlocks.
15. Environment errors: Errors that occur when the program is run in an environment that it was not designed for or when the environment is not set up correctly.

3- PHP Is Programming or Scripting Language

PHP is scripting language

4- Examples for Interpreter Languages

1. Python
2. JavaScript
3. Ruby
4. Perl
5. Lua
6. Tcl
7. PHP
8. R
9. Swift
10. MATLAB
11. Lisp
12. Prolog
13. BASIC
14. AWK

5- Types of the way to write code and the best way

1. Procedural programming
2. Object-oriented programming
3. Functional programming
4. Declarative programming
5. Imperative programming
6. Scripting
7. Modular programming
8. Test-driven development
9. Pair programming
10. Code review
11. Code generation
12. Domain-specific language (DSL) programming

- 13. Aspect-oriented programming
- 14. Reactive programming
- 15. Low-code or no-code programming

There's no best way to do it, it's depending on what code that you will write.