

Appendix 1

Check whether you know subjects connected with programming.

With the method drag and drop match occupations to the descriptions.

Database developer – designs and manages data sets for specific fields, for example staff, payment. He uses SQL, MySQL, Oracle or Microsoft SQL Server.

Application developer – it is a person who designs, creates and maintains computer applications for different industries and fields. He knows programming languages Java, Python, Ruby, C# or JavaScript, and also programming tools and technologies, such as Git, Docker, SQL, HTML or CSS.

Utility programmer – develops system programmes (e.g. operating systems) and special programmes (e.g. controlling production processes), creates tools, such as compilers, debuggers, code editors, tools for testing software, automatic building systems, version control and project management. He knows Python, Ruby, Bash or C++ languages, knows technologies such as Docker, Jenkins, Git or Selenium.

Backend developer – creates API, which enables interaction between application and other applications or internet services. He takes care of safety application, implementing appropriate methods of authentication and authorization, protecting sensitive data and securing applications from attacks; uses Java, Python, Ruby, PHP programming languages.

Frontend developer – creates user interface, influences appearance of website using HTML, CSS, JavaScript code.

Application tester – checks correctness of written programme, has knowledge from technology such as JavaScript, HTML, Selenium and GIT.

Project manager – manages creation of the whole programme on every stage of its coming into being.

UI/Design – creates visual projects and interface, among others for internet websites or mobile applications, in order to ensure better impressions for users. He uses Sketch, Adobe XD, Figma software.

Application analyst – is responsible for contacts with clients, analyses and shows his/her needs to the team.

Appendix 2

Solve the test marking one correct answer.

- To repeat the same operation in the code of a specific application we use a function:
 - conditional 'if'
 - iterative 'for'**
 - choice 'switch'
 - one-dimensional array
- Give me the result of work of a programme written in JavaScript language, placed below, after giving input value 5.

```
var n, i;
var a = 1;

n = prompt("Podaj n:", "");
for (i=n; i>=2; i--)
  a*=i;

document.write("wynik ",a);
```

- 120**
 - 125
 - 625
 - 60
- JavaScript instruction shown below will display:

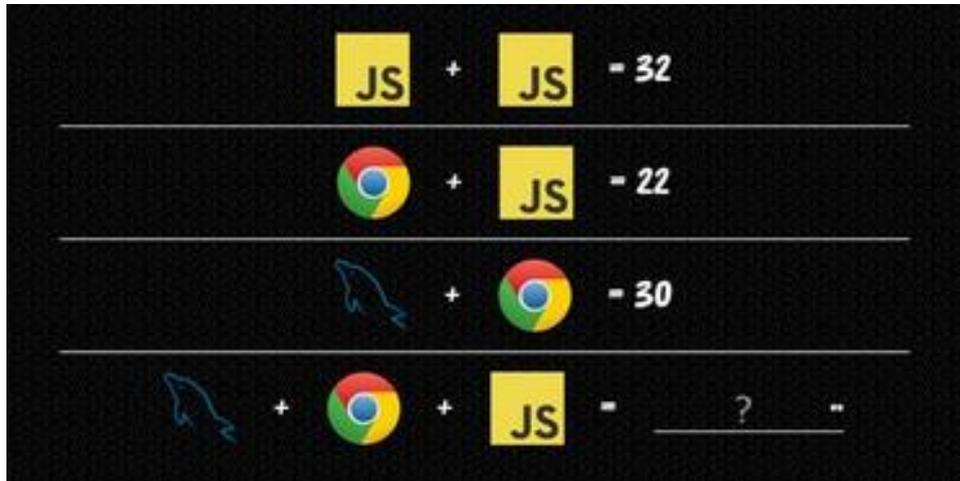
```
document.write(5=== '5');
```

- True
 - False**
 - 0
 - 1
- In JavaScript code the loop will be performed:

```
var x=1, i=0;
do{
  x*=3;
  i++;
}
while(x!=27);
```

- 3 times**
 - 2 times
 - 27 times
 - 26 times
- To test correctness of performance of JavaScript code one has to use
 - Compiler C++
 - Console in the browser**
 - PHP interpreter
 - PERL interpreter
 - JavaScript language supports
 - virtual functions
 - sending cookies with the same information to many clients of the webpage
 - DOM objects**
 - abstract class

7. Calculate value of the operation



Answer:

If the test is easy for You and its solution has brought you much joy, you like solving mathematical and logical puzzles, you learn new things fast, are able to analyse performance of codes in programming languages, you will find yourself in occupations like: frontend developer, application developer or application tester.