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**ОТЧЕТ**

**UNIT 6**

«Operating systems»

по дисциплине:

**Профессиональная подготовка на английском языке**

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**Starter**

1. Study this screen display and answer these questions.

|  |  |  |
| --- | --- | --- |
|  | Questions | Answers |
| 1 | 1 How do you enter Unix commands? | The Unix commands are entered from a keyboard. |
| 2 | 2 Which Unix commands does it show? | The commands it shows are date, passwd,  ls, logout. |
| 3 | 3 What is the output of each command? | The outputs of each command are:  date – a current date;  passwd – a dialog of changing of the current login password;  ls – a list of files  logout – outputs nothing, just user logouts of the system. |
| 4 | 4 What will happen when the last command is entered? | If the command logout is entered when the user is already out, the system outputs an error message. |
| 5 | 5 Which other Unix commands do you know? | I know the following commands:  mkdir, cd , grep, ff, last, talk, write, and so on. |

**Reading**

2. Match the labels to the four layers of this diagram with the help of the diagram caption.

1 applications programs - b

2 user - a

3 hardware- d

4 operating system - c

3. Study this text title. What do you think it means?

Operating Systems: Hidden Software.

By the name ‘hidden software’ are meant programs that don’t have a user interface and run on a computer for providing some services for users programs.

Now read this text to check your answer and to find the answers to

these questions:

1. What difference is there between applications software and operating systems?

The main difference between applications software and operating systems are that first listed software run for reaching the user's goals such as calculating something, editing texts, gates and so on, whereas the second one serves for providing access of user's programs to computers hardware and their managing.

1. Why is the supervisor program the most important operating system program?

The reasons why the supervisor program is the most important program of an operating system are that it manages all the operating system.

1. What is the difference between resident and non-resident programs?

Resident programs once started, remain in the memory of a computer, whereas non-resident programs are loaded into the memory only as needed.

4. What are the main functions of an operating system?

An operating system has three main functions: manage the computer’s resources, establish a user interface and execute an application programs.

4. Complete the gaps in this summary of the text on operating systems using these linking words and phrases:

although

because

but

in addition

such as

therefore

The user is aware of the effects of different applications programs **but** operating systems are invisible to most users. They lie between applications programs, **such as**  wordprocessing, and the hardware. The supervisor program is the most important. It remains in memory, **therefore** it is referred to as resident. Others are called non-resident **because** they are loaded into memory only when needed. Operating systems manage the computer's resources, **such as** the central processing unit. **In addition**, they establish a user interface, and execute and provide services for applications software. Although applications programs, they are carried out by the operating system.

**Language work**

5. Rewrite each of these sentences like this:An important function of the operating system is to manage the computer's resources.

Managing the computer's resources is an important function of the operating system.

|  |  |
| --- | --- |
| One task of the supervisor program is to load into memory non-resident programs as required. | Loading into memory non-resident programs as required is one task of the supervisor program. |
| The role of the operating system is to communicate directly with the hardware. | Communicating with the hardware directly is the role of the operating system. |
| One of the key functions of the operating system is to establish a user interface. | Establishing a user interface is one of the key functions of the operating system. |
| An additional role is to provide services for applications software. | Providing services for applications software is an additional role. |
| Part of the work of mainframe operating systems is to support multiple programs and users. | Supporting multiple programs and users is part of the work of mainframe operating systems. |
| The task in most cases is to facilitate interaction between a single user and a PC. | Facilitating interaction between a single user and a PC is the task in most cases. |
| One of the most important functions of a computer is to process large amounts of data quickly. | Processing large amounts of data quickly is one of the most important functions of a computer. |
| The main reason for installing more memory is to allow the computer to process data faster. | Allowing the computer to process data faster is the main reason for installing more memory. |

6. Complete these sentences with the correct form of the verb: infinitive or -ing form.

|  |  |
| --- | --- |
| Don't switch off without (close down) your PC. | Don't switch off without **closing down** your PC. |
| I want to (upgrade) my computer. | I want **to upgrade** my computer. |
| He can't get used to (log on) with a password. | He can't get used **to logging on** with a password. |
| You can find information on the Internet by (use) a search engine. | You can find information on the Internet by **using** a search engine. |
| He objected to (pay) expensive telephone calls for Internet access. | He objected **to paying** expensive telephone calls for Internet access. |
| He tried to (hack into) the system without (know) the password. | He tried **to hack** into the system without **knowing** the password. |
| You needn't learn how to (program) in HTML before (design) webpages. | You needn't learn how to **program** in HTML before **designing** webpages. |
| I look forward to (input) data by voice instead of (use) a keyboard. | I look forward **to input** data by voice instead of **using** a keyboard. |

**Problem solving**

7. Try to find the commands from the lists below which will have these actions.

|  |  |  |
| --- | --- | --- |
| Action | VMS command | Unix command |
| List all the files in a directory | directory | ls |
| Delete a file | delete | rm |
| Rename a file | rename | mv |
| Copy a file | copy | cp |
| Send a file to a printer | print | lpr |
| Obtain help | help | man |
| Create a directory | create/directory | mkdir |
| Show date and time | show time | date |
| Show users on system | show users | rwho |
| Talk to other users on system | phone | write |
| Search for a string in a file | search | grep |

**Speaking**

8. Work in pairs, A and B. Each of you has information about some popular operating systems. Find out from the information you have and by asking each other, the answers to these questions:

|  |  |
| --- | --- |
| Questions | Answers |
| Which operating system is used on Apple Macintosh microcomputers? | On Apple Macintosh microcomputers is used the graphically-oriented operating system Mac OS. |
| What is Penpoint designed for? | The Penpoint operating system is designed for pen-based computers. |
| Name one system used on IBM mainframes. | One of the system used on IBM mainframes is MVS |
| Which operating system is Linux related to? | The operating system Linux is related to the Unix system. |
| Name an IBM operating system similar to MS-DOS. | An IBM operating system that is similar to MS-DOS called PC-DOS. |
| Which operating system replaced MS-DOS? | The Windows 9X operating system replaced MS-DOS. |
| Which systems are in fact graphically orientated shells for MS-DOS? | The systems Windows 3.x are graphically orientated shells for MS-DOS. |
| How many versions of Windows 9X were developed? | Two versions of the Windows 9X system were developed. |
| Which operating systems are designed for networks? | The NetWare system are designed for networks. |
| Which operating system is used by DEC VAX minicomputers? | The VAX/VMS system is used by DEC VAX minicomputers. |

**Writing**

9. This description of the Mac OS X is drawn from the table below. Write a similar description of Linux.

Linux is a Unix-based operating system designed for use on a wide variety of computers. It has a variety of distribution kits available. Graphics are provided by a graphics engine known as XFree86. It provides two types of user interface: command line and GUI. The source code of the Linux operating system is freely available.

**Specialist reading**

A. Find the answers to these questions in the following texts.

|  |  |  |
| --- | --- | --- |
|  | Question | Answers |
| 1 | What did Linus Torvalds use to write the Linux kernel? | Linus Torvalds used the GNU programming tools. |
| 2 | How was the Linux kernel first made available to the general public? | When the Linux kernel has been written, it was released on the Internet. |
| 3 | What is a programmer likely to do with source code? | A programmer can fix bugs in source code, extend or develop it. |
| 4 | Why will most software companies not sell you their source code? | Most software companies don’t sell their source code because they believe that if they do it, it will destroy their revenue stream. |
| 5 | What type of utilities and applications are provided in a Linux distribution? | In a Linux distribution are provided utilities that allowing you to do a lot of things – command interpreters, programming tools, text editors, typesetting tools, and graphical user interfaces based on the X windowing system. |
| 6 | What is X? | X is a windowing system on which people implement graphical interfaces like KDE and Gnome. |
| 7 | What graphical user interfaces are mentioned in the text? | In the text are mentioned the KDE and Gnome graphical user interfaces. |

B1. Match the terms in Table A with the statements in Table B.

Table A

|  |  |
| --- | --- |
| a | Kernel |
| b | Free Software Foundation |
| c | Source code |
| d | Open Source |
| e | A distribution |
| f | X |

Table B

|  |  |
| --- | --- |
| I | A type of software development where any programmer can develop or fix bugs in the software |
| II | The original systems program from which compiled programs are generated |
| III | A complete operating system kit with the utilities and applications you need to make it do useful things |
| IV | A standard distributed windowing system on which people implement graphical interfaces |
| V | An organisation of volunteers dedicated to making good software that anyone could use without paying |
| VI | The core of an operating system that handles memory allocation, talks to hardware devices, and makes sure everything keeps running |

Answers

|  |  |
| --- | --- |
| A type of software development where any programmer can develop or fix bugs in the software | Open Source |
| The original systems program from which compiled programs are generated | Source code |
| A complete operating system kit with the utilities and applications you need to make it do useful things | A distribution |
| A standard distributed windowing system on which people implement graphical interfaces | X |
| An organization of volunteers dedicated to making good software that anyone could use without paying | Free Software Foundation |
| The core of an operating system that handles memory allocation, talks to hardware devices, and makes sure everything keeps running | Kernel |

B2. Mark the following statements as True or False:

|  |  |  |
| --- | --- | --- |
| a | Linux was created in the 1980s. | False |
| b | Minix was created by a university student. | False |
| c | Linux is based on Unix | True |
| d | Minix is based on Unix. | True |
| e | Linux runs on more types of computer than any other operating system | True |