**STATIC KEYWORD**

QUES-1) WHY DO WE NEED STATIC KEYWORD IN JAVA, EXPLAIN WITH THE HELP OF EXAMPLE?

ANS) WE USE STATIC KEYWORD IN JAVA TO SAVE THE MEMORY, AND MAKE OUR PROGRAM FASTER, IN LESS SPACE AND OPTIMAL TIME COMPLEXITY.

QUES-2) WHAT IS CLASS LOADING AND HOW DOES THE JAVA PROGRAM ACTUALLY EXECUTES?

ANS) CLASS LOADING- IN THIS PROCESS WE USED TO LOAD THE CLASS AT RUN TIME

IT IS DIVIDED INTO THREE PHASE :-

1. LOADING- IN THIS PHASE THE BYTE CLASS IS LOADED AT RUNTIME VIA CLASS LOADER
2. LINKING- IN THIS PHASE THE VERIFICATION IS DONE, WHETHER THE OBTAINED CODE IS RECEIVED IS VERIFIED AND HAVE NO ERRORS.
3. INITIALIZATION- IN THIS PHASE THE INITIALIZATION IS DONE, TO ACTUALLY MAKE THE PROGRAM EXECUTE

QUES-3) CAN WE MARK A LOCAL VARIABLE STATIC?

ANS) YES

QUES-4) WHY IS THE STATIC BLOCK EXECUTED BEFORE THE MAIN METHOD IN JAVA?

ANS) THE STATIC BLOCK IS EXECUTED AT RUNTIME.

QUES-5) WHY IS A STATIC METHOD ALSO CALLED A CLASS METHOD?

ANS) THE STATIC METHOD IS CLASS ORIENTED, WE CAN ACCESS THROUGH CLASS NAME, IT TAKES SPACE IN THE CLASS.

QUES-6) WHAT IS THE USE OF STATIC BLOCKS IN JAVA?

ANS) STATIC BLOCKS USE:-

1. IT IS USED TO SAVE MEMORY, MAKE PROGRAM MEMORY EFFICIENT
2. IT IS ACCESSED THROUGH CLASS NAME

QUES-7) DIFFERENCE BETWEEN STATIC AND INSTANCE VARIABLE?

ANS) STATIC VARIABLE- THE VARIABLE IN WHICH WE USE STATIC KEYWORD, IT TAKES SPACE IN CLASS MEMORY, CAN BE WRITTEN IN STATIC BLOCK, WE USE TO SAVE MEMORY, REPEATED VARIABLES.

INSTANCE VARIABLE- THE VARIABLE WHICH IS USED TO STORE IN HEAP, HAVE SOME MEMORY, WE USE NEW KEYWORD TO MAKE THE INSTANCE VARIABLE

QUES-8) DIFFERENCE BETWEEN STATIC AND NON- STATIC VARIABLE?

ANS) STATIC VARIABLE- THE VARIABLE IN WHICH WE USE STATIC KEYWORD, IT TAKES SPACE IN CLASS MEMORY, CAN BE WRITTEN IN STATIC BLOCK, WE USE TO SAVE MEMORY, REPEATED VARIABLES.

NON STATIC VARIABLE- THE VARIABLE IN WHICH WE DON’T HAVE TO USE THE STATIC KEYWORD, IT IS ALSO KNOWN AS INSTANCE VARIABLE, LOCAL VARIABLE.