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| Experiment 10 |

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| **Aim** | Assume that a system has a 32-bit virtual address with a 4-KB page size. Write a C program that  is passed a virtual address (in decimal) on the command line and have it output the page number and offset for the given address. |
| **Code:** | #include <stdio.h>  #include <stdlib.h>  #define PAGE\_SIZE 4096 *// 4KB in bytes*  int main(int *argc*, char \**argv*[]) {      if (*argc* != 2) {          printf("Usage: %s <virtual\_address>\n", *argv*[0]);          return 1;      }      unsigned int virtual\_address = atoi(*argv*[1]);      unsigned int page\_number = virtual\_address / PAGE\_SIZE;      unsigned int offset = virtual\_address % PAGE\_SIZE;      printf("The address %u contains:\n", virtual\_address);      printf("page number = %u\n", page\_number);      printf("offset = %u\n", offset);      return 0;  } |
| **Output**: |  |
| **Conclusion** | Hence, by completing this experiment I came to know about a system has a 32-bit virtual address with a 4-KB page size. Write a C program that  is passed a virtual address (in decimal) on the command line and have it output the page number and offset for the given address. |