システムプログラミング14回

1G151035 栗栖遼馬

問１

8

問２

5

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問３

8

問4

実行結果

**piData :0x7fff525e4998**

**piData2 :0x7fff525e499c**

**問5**

**```**

**#include <stdio.h>**

**int myStrlen(char \*szData);**

**int main() {**

**char szData[] = "abcde";**

**printf("szData length = %d\n", myStrlen(szData));**

**return 0;**

**}**

**int myStrlen(char \*szData) {**

**int Len;**

**Len = 0;**

**while(\*(szData+Len) !='\0'){**

**Len++;**

**}**

**return Len;**

**}**

**```**

**問６**

**```**

**int main() {**

**char szData[] = "abcde";**

**int i;**

**for(i=0;i<strlen(szData); i++){**

**\*(szData +i) = toupper(\*(szData + i));**

**}**

**printf("szData=abcde => %s",szData);**

**return 0;**

**}**

**```**

**問7**

**```**

**#include <stdio.h>**

**#include <time.h>**

**void printTime(struct tm \*pstTm);**

**int main(void) {**

**time\_t time\_tData;**

**struct tm \*pstTm;**

**time\_tData = time(NULL);**

**pstTm = localtime(&time\_tData);**

**printTime(pstTm);**

**return 0;**

**}**

**void printTime(struct tm \*pstTm) {**

**printf("%d/",pstTm->tm\_year + 1900);**

**printf("%d/",pstTm->tm\_mon + 1);**

**printf("%d/",pstTm->tm\_mday);**

**printf(" %d:",pstTm->tm\_hour);**

**printf("%d:",pstTm->tm\_min);**

**printf("%d",pstTm->tm\_sec);**

**}**

**```**

**問8**

**```**

**#include <stdio.h>**

**#include <stdlib.h>**

**#include <string.h>**

**int main(int argc,char \*argv[]){**

**FILE \*fp;**

**int cr;**

**fp = fopen(argv[1],"r");**

**if(fp == NULL){**

**printf("err:%s",argv[1]);**

**}**

**fseek(fp,0,SEEK\_END);**

**printf("file size : %d byte",ftell(fp));**

**}**

**```**

**問9**

**```**

**#include <stdio.h>**

**#include <stdlib.h>**

**#include <string.h>**

**void addString(char \*szData1, char \*szData2, char \*szAddArea);**

**int main(void) {**

**char \*szData1 = "abcd";**

**char \*szData2 = "efgh";**

**char \*szAddArea = NULL;**

**szAddArea = malloc(strlen(szData1) + strlen(szData2) + 1);**

**if (szAddArea == NULL) {**

**printf("malloc-error\n");**

**return -1;**

**}**

**addString(szData1, szData2, szAddArea);**

**printf("AddString:%s<\n", szAddArea);**

**free(szAddArea);**

**return 0;**

**}**

**void addString(char \*szData1, char \*szData2, char \*szAddArea) {**

**int len1 = strlen(szData1);**

**int len2 = strlen(szData2);**

**char copy[len1+len2+1] ;**

**strcpy(copy,szData1);**

**strcpy(copy+len1,szData2);**

**strcpy(szAddArea,copy);**

**}**

**```**