**Assignment Policy:**

1. Late assignments will NOT be accepted.
2. Student work individually.
3. Cheating is forbidden in this course and will be considered a **-10 mark**
4. All assignments must be keyboarded **(handwritten work will NOT be accepted).**
5. Assignments should be stapled and placed in an unsealed envelope
6. Your submitted work has to be **neat** and **clean**.
7. Please clearly write your **name**, **section number**, and **student number**.
8. You should add the cover page that has your full information to your answers sheet.

Substantial departures from the above guidelines will NOT be graded.

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*Homework Q1, Q3 (a) and Q5: to be submitted Next Monday 23/2/2015*

**Q1. Design an algorithm for a program that prompts the user to input the elapsed time for an event in hours, minutes, and seconds. The program then outputs the elapsed time in seconds. Draw the flowchart.**

**Q2. What is the output of the following segments?**

(a) int main(void)

{

char x[] = ”CSC201 Programming With C”;

char y [30];

char z [7];

strcpy(y,x);

strncpy(z,y,6);

printf(“%s%s \n”,”String X = ”, x);

printf(“%s%s \n”,”String Y = ”, y);

printf(“%s%s \n”,”String Z = ”, z);

}

(b) int main(void)

{

char x[] = "CSC201 Programming With C";  
char y[20];

char z[12];  
char w[7];  
int index = 4;

strcpy(y, &x[7]);  
strncpy(z, y, 11);  
strncpy(w, &x[0], index + 2);  
printf("%s\n", y);  
printf("%s\n", z);  
printf("%s", w);

}

(c) int main(void)

{

char x[] = "CSC201 Programming";  
char y[] = "CSC111";  
char z[20];  
char w[20];  
strcpy(z,x);  
strcpy(w,x);  
strcpy(z,y);  
strncpy(w, y, 6);  
printf("%s\n%s", z, w);

}

(d) int main(void)   
 {

char str [] = "Hello World";   
printf ("%s", &str[6]);

}

(e) int main(void)  
 {

char str1[] = "Good Luck";  
char str2[10];  
strncpy (str2, &str1[5], 4);

str2[3] = '\0';  
printf("%s", str2);

}

**Q3) Find and correct the errors in the following segments:**

(a) **(Two errors)**

int main(void)

{

char name [20];

char str [40];

printf("%s","Enter Your Name: ");

scanf ("%20s", &name);   
str = "Your name is ";

printf("%s%s", str, name);

}

(b) **(One error)**

int main(void)  
 {

char str1[] = "Welcome";  
char str2[7];   
strcpy (str2, str1);

printf("%s", str2);   
 }

(c) **(Two errors)**

int main(void)  
 {

char str1[] = "Hello World";  
char str2[12];  
strncpy (str2, str1[6]);

}

**Q4) Write C statements that accomplish the following:**

a) Assigns the end of the string s2 to the string s1 starting from the fourth character.

b) Swaps the first half of the string s1 with the second half of the string s2, using strcpy and strncpy, and prints the resulted string (Note: both s1 and s2 composed of 4 characters).

c) Prints the string str, which composed of 3 characters, in reverse order.

**Q5) Write a C program that reads a string (composed of 3 characters) and prints it in upper case letters.**