**MARKS AWARDED: 96**

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\* CS1010 AY2011/2 Semester 2 Lab2 Ex3

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\* cookies.c

\* Read in a positive integer

\* Add up its digits repeatedly until the sum is a single digit

\* and print out the corresponding Fortune Cookie message

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\* B02

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#include <stdio.h>

int sum\_digits(int);

void print\_cookie(int);

int main(void)

{

int number,digit;

printf("Enter a positive integer: ");

scanf("%d", &number);

digit=sum\_digits(number);

print\_cookie(digit);

return 0;

}

// Extract out the digits

int sum\_digits (int N)

{

int sum;

for (sum=N;N>=10;N=sum) // Perform loop when sum of digits or number is greater than 10

{

for(sum=0;N!=0;N/=10) // Extract out and sum the digits

{

sum+=N%10;

}

}

return sum;

}

// Print out the corresponding Fortune Cookie message

void print\_cookie(int digit)

{

switch (digit)

{ case 1: printf("You will have a fine capacity for the enjoyment of life.\n");break;

case 2: printf("Now is the time to try something new.\n");break;

case 3: printf("Don't let doubt and suspicion bar your progress.\n");break;

case 4: printf("Your principles mean more to you than any money or success.\n");break;

case 5: printf("Accept the next proposition you hear.\n");break;

case 6: printf("A handful of patience is worth more than a bushel of brains.\n");break;

case 7: printf("You have an active mind and a keen imagination.\n");break;

case 8: printf("You are talented in many ways.\n");break;

case 9: printf("Treat everyone as a friend.\n");break;

}

}