Writing programs or programming is a very creative

and rewarding activity You can write programs for

many reasons ranging from making your living to solving

a difficult data analysis problem to having fun to helping

someone else solve a problem This book assumes that

{\em everyone} needs to know how to program and that once

you know how to program, you will figure out what you want

to do with your newfound skills

We are surrounded in our daily lives with computers ranging

from laptops to cell phones We can think of these computers

as our personal assistants who can take care of many things

on our behalf The hardware in our current-day computers

is essentially built to continuously ask us the question

What would you like me to do next

Our computers are fast and have vasts amounts of memory and

could be very helpful to us if we only knew the language to

speak to explain to the computer what we would like it to

do next If we knew this language we could tell the

computer to do tasks on our behalf that were reptitive

Interestingly, the kinds of things computers can do best

are often the kinds of things that we humans find boring

and mind-numbing